IceCube M&O Staffing Matrix sort by WBS v17.0 2014.0915.xls

WBS L2	WBS L3	Institution	Lab or Cat.	Names	Tasks	NSF M&O Core	NSF Base Grants	U.S. Institutional In-Kind	Europe & Asia Pacific In-Kind	Grand Total
2.1 Program Management	2.1.1 Administration	LBNL	KE	KLEIN,SPENCER	Supervise LBNL effort	0.05				0.05
2.1 Program Management	2.1.1 Administration	LBNL	KE	KLEIN,SPENCER	Pubcom member			0.10		0.10
2.1 Program Management	2.1.1 Administration	UWRF	KE	MADSEN, JIM	Speakers Comm Chair			0.25		0.25
2.1 Program Management	2.1.1 Administration	MSU	KE	DEYOUNG, TYCE	Deputy Spokesperson			0.20		0.20
2.1 Program Management	2.1.1 Administration	UCB	SC	FILIMONOV, KIRILL	Pubcom member		0.10			0.10
2.1 Program Management	2.1.1 Administration	UCB	SC	WOSCHNAGG, KURT	Speakers Comm member		0.10			0.10
2.1 Program Management	2.1.1 Administration	UCB	SC	WOSCHNAGG, KURT	Pubcom member		0.10			0.10
2.1 Program Management	2.1.1 Administration	UD	KE	GAISSER, TOM	ExecCom member			0.20		0.20
2.1 Program Management	2.1.1 Administration	UD	KE	STANEV, TODOR	Pubcom member			0.10		0.10
2.1 Program Management	2.1.1 Administration	UD	KE	EVENSON, PAUL	Managing solar and heliospheric			0.05		0.05
2.1 Program Management	2.1.1 Administration	UMD	KE	SULLIVAN, GREG	ExecCom member			0.20		0.20
2.1 Program Management	2.1.1 Administration	UMD	KE	SULLIVAN, GREG	M&O/Upgrade planning			0.30		0.30
2.1 Program Management	2.1.1 Administration	UMD	SC	BLAUFUSS, ERIK	Analysis Coordinator		0.40			0.40
2.1 Program Management	2.1.1 Administration	UMD	SC	OLIVAS, ALEX	IceCube Weekly call coordination	0.20				0.20
2.1 Program Management	2.1.1 Administration	SBU	KE	KIRYLUK,JOANNA	Simulation Prod. Comm member, ICB member			0.05		0.05
2.1 Program Management	2.1.1 Administration	UW	KE	HALZEN, FRANCIS	Principle Investigator	0.38				0.38
2.1 Program Management	2.1.1 Administration	UW	KE	HALZEN, FRANCIS	Principle Investigator			0.12		0.12
2.1 Program Management	2.1.1 Administration	UW	KE	KARLE, ALBRECHT	Associate Director for	0.38				0.38
2.1 Program Management	2.1.1 Administration	UW	KE	KARLE, ALBRECHT	ExecCom member			0.20		0.20
2.1 Program Management	2.1.1 Administration	UW	KE	HANSON, KAEL	Director of IceCube Maintenance and Operations	0.75				0.75
2.1 Program Management	2.1.1 Administration	UW	SC	DESIATI, PAOLO	Coordination Committee chair	0.20				0.20
2.1 Program Management	2.1.1 Administration	UW	KE	VANDENBROUCKE, JUSTIN	Pubcom member			0.10		0.10
2.1 Program Management	2.1.1 Administration	UW	MA	MERINO, GONZALO	Computing Infrastructure	1.00				1.00
2.1 Program Management	2.1.1 Administration	UW	MA	PELES, ADI	Resource Coordinator	0.20				0.20
2.1 Program Management	2.1.1 Administration	UW	AD	VAKHNINA, CATHERINE	Resource Coordinator	0.75				0.75
2.1 Program Management	2.1.1 Administration	**US Total**				**3.91**	**0.70**	**1.87**		**6.48**
2.1 Program Management	2.1.1 Administration	ALBERTA	KE	GRANT, DARREN	Pubcom member				0.10	0.10
2.1 Program Management	2.1.1 Administration	DESY	KE	KOWALSKI, MAREK	ExecCom member				0.20	0.20
2.1 Program Management	2.1.1 Administration	DPNC	KE	MONTARULI, TERESA	ICB Member, UHECR'neutrino coordinator				0.20	0.20
2.1 Program Management	2.1.1 Administration	ERLANGEN	KE	KAPPES, ALEXANDER	Pubcom Chair				0.25	0.25
2.1 Program Management	2.1.1 Administration	ERLANGEN	KE	KAPPES, ALEXANDER	ExecCom member				0.20	0.20
2.1 Program Management	2.1.1 Administration	SU	KE	FINLEY, CHAD	ICB Member				0.05	0.05
2.1 Program Management	2.1.1 Administration	SU	KE	HULTQVIST, KLAS	ICB Member				0.05	0.05
2.1 Program Management	2.1.1 Administration	SU	KE	FINLEY, CHAD	Coordination with LIGO				0.10	0.10
2.1 Program Management	2.1.1 Administration	SU	KE	WALCK, CHRISTIAN	Publications Bookkeeping				0.10	0.10
2.1 Program Management	2.1.1 Administration	UC	KE	ADAMS, JENNI	ICB Member				0.05	0.05
2.1 Program Management	2.1.1 Administration	ULB	KE	HANSON, KAEL	ExecCom member				0.20	0.20
2.1 Program Management	2.1.1 Administration	ULB	KE	HANSON, KAEL	South Pole On Ice Lead Jan 2014				0.10	0.10
2.1 Program Management	2.1.1 Administration	UU	KE	BOTNER, OLGA	Spokesperson				0.30	0.30
2.1 Program Management	2.1.1 Administration	UU	KE	BOTNER, OLGA	ExecCom member				0.20	0.20

WBS L2	WBS L3	Institution	Lab or Cat.	Names	Tasks	NSF M&O Core	NSF Base Grants	U.S. Institutional In-Kind	Europe & Asia Pacific In-Kind	Grand Total
2.1 Program Management	2.1.1 Administration	UU	KE	DE LOS HEROS, CARLOS	Pubcom member				0.10	0.10
2.1 Program Management	2.1.1 Administration	UU	KE	HALLGREN, ALLAN	Speakers Comm member				0.10	0.10
2.1 Program Management	2.1.1 Administration	VUB	KE	DE CLERCQ, CATHERINE	Institutional Lead				0.20	0.20
2.1 Program Management	2.1.1 Administration	WUPPERTAL	KE	HELBING, KLAUS	Speakers Comm member				0.10	0.10
2.1 Program Management	2.1.1 Administration	RWTH	KE	WIEBUSCH, CHRISTOPHER	ExecCom member				0.20	0.20
2.1 Program Management	2.1.1 Administration	RWTH	KE	WIEBUSCH, CHRISTOPHER	Pubcom member				0.10	0.10
2.1 Program Management	2.1.1 Administration	MAINZ	KE	KOPKE, LUTZ	Supernova group Co-Chair				0.25	0.25
2.1 Program Management	2.1.1 Administration	BOCHUM	KE	TJUS, JULIA	Pubcom member				0.10	0.10
2.1 Program Management	2.1.1 Administration	**Non-US Total**							3.25	3.25
2.1 Program Management	**2.1.1 Administration**					3.91	0.70	1.87	3.25	9.73
2.1 Program Management	2.1.2 Engineering And R&D Support	PSU	KE	COWEN, DOUG	PINGU Co-Lead			0.35		0.35
2.1 Program Management	2.1.2 Engineering And R&D Support	OSU	KE	BEATTY, JAMES	PINGU Electronics and Calibration Development			0.10		0.10
2.1 Program Management	2.1.2 Engineering And R&D Support	OSU	PO	ANDERSON, TYLER	PINGU Electronics and Calibration Development			0.25		0.25
2.1 Program Management	2.1.2 Engineering And R&D Support	UMD	KE	HOFFMAN, KARA	Detector R&D			0.20		0.20
2.1 Program Management	2.1.2 Engineering And R&D Support	UW	SC	DUVERNOIS, MICHAEL	Specialized simulations, designing new filters, unusual data selections, extracting specialized information	0.25				0.25
2.1 Program Management	2.1.2 Engineering And R&D Support	UW	SC	DUVERNOIS, MICHAEL	Ongoing EMI studies & mitigation, South Pole & Northern test site instrumentation, Summer South Pole field work	0.25				0.25
2.1 Program Management	2.1.2 Engineering And R&D Support	UW	EN	LAUNDRIE, ANDREW	Engineering Support: IceCube Lab Summer operations, cabling, & instrumentation testing	0.80				0.80
2.1 Program Management	2.1.2 Engineering And R&D Support	UW	EN	SANDSTROM, PERRY	Ongoing EMI studies & mitigation, South Pole & Northern test site instrumentation, In-field work	0.15				0.15
2.1 Program Management	2.1.2 Engineering And R&D Support	UW	EN	SANDSTROM, PERRY	Engineering Support: IceCube Lab Summer operations, fieldwork management, design of the pDOM, GPS maintenance	0.75				0.75
2.1 Program Management	2.1.2 Engineering And R&D Support	UW	MA	HAUGEN, JAMES	Engineering Support: logistics, northern hemisphere testing, & vendor management	0.55				0.55
2.1 Program Management	2.1.2 Engineering And R&D Support	**US Total**				2.75	0.00	0.90		3.65
2.1 Program Management	2.1.2 Engineering And R&D Support	DESY	KE	NAHNHAUER, ROLF	Surface electronics, Optical detector R&D				0.10	0.10
2.1 Program Management	2.1.2 Engineering And R&D Support	DESY	KE	KARG, TIMO	Surface electronics, Optical detector R&D				0.10	0.10
2.1 Program Management	2.1.2 Engineering And R&D Support	DESY	SC	YANEZ, JUAN-PABLO	Optical detector R&D				0.10	0.10
2.1 Program Management	2.1.2 Engineering And R&D Support	ALBERTA	KE	GRANT, DARREN	PINGU Co-Lead				0.35	0.35
2.1 Program Management	2.1.2 Engineering And R&D Support	ALBERTA	KE	KOPPER, CLAUDIO	Lead in-ice high-energy extension				0.35	0.35

WBS L2	WBS L3	Institution	Lab or Cat.	Names	Tasks	NSF M&O Core	NSF Base Grants	U.S. Institutional In-Kind	Europe & Asia Pacific In-Kind	Grand Total
2.1 Program Management	2.1.2 Engineering And R&D Support	MAINZ	PO	BOSSER, SEBASTIAN	PINGU R&D and software coordinator				0.20	0.20
2.1 Program Management	2.1.2 Engineering And R&D Support	RWTH	PO	AUFFENBERG, JAN	Surface Veto, IceCube extensions				0.30	0.30
2.1 Program Management	2.1.2 Engineering And R&D Support	SKKU	PO	BOSE, DEBANJAN	Reconstruction tools for PINGU				0.15	0.15
2.1 Program Management	2.1.2 Engineering And R&D Support	ULB	KE	HANSON, KAEL	EMI Measurements				0.10	0.10
2.1 Program Management	2.1.2 Engineering And R&D Support	ULB	PO	O'MURCHADHA, AONGUS	EMI Measurements				0.10	0.10
2.1 Program Management	2.1.2 Engineering And R&D Support	GENT	SC	UGENT SC	Acoustic R&D Support				0.05	0.05
2.1 Program Management	2.1.2 Engineering And R&D Support	GENT	GR	UGENT GR	Acoustic R&D Support				0.05	0.05
2.1 Program Management	2.1.2 Engineering And R&D Support	**Non-US Total**							1.95	1.95
2.1 Program Management	**2.1.2 Engineering And R&D Support**					**2.75**	**0.00**	**0.90**	**1.95**	**5.60**
2.1 Program Management	2.1.3 Usap Support	UW	MA	HAUGEN, JAMES	USAP Support: yearly sip, coordination with contractor (ASC)	0.25				0.25
2.1 Program Management	2.1.3 Usap Support	**US Total**				**0.25**				**0.25**
2.1 Program Management	**2.1.3 Usap Support**					**0.25**				**0.25**
2.1 Program Management	2.1.4 Education & Outreach	PSU	KE	COWEN, DOUG	Education & Outreach			0.05		0.05
2.1 Program Management	2.1.4 Education & Outreach	MSU	KE	DEYOUNG, TYCE	Education & Outreach			0.05		0.05
2.1 Program Management	2.1.4 Education & Outreach	SDSMT	KE	XINHUA, BAI	Education & Outreach			0.04		0.04
2.1 Program Management	2.1.4 Education & Outreach	UCB	KE	PRICE, BUFORD	Education & Outreach			0.10		0.10
2.1 Program Management	2.1.4 Education & Outreach	UMD	KE	UMD KE	Education & Outreach			0.10		0.10
2.1 Program Management	2.1.4 Education & Outreach	UW	AD	BRAVO GALLART, SILVIA	Education & Outreach	0.25				0.25
2.1 Program Management	2.1.4 Education & Outreach	UW	AD	Madsen, Megan	Education & Outreach Coordination	0.75				0.75
2.1 Program Management	2.1.4 Education & Outreach	UWRF	KE	MADSEN, JIM	Teachers program and	0.10				0.10
2.1 Program Management	2.1.4 Education & Outreach	UWRF	AD	UWRF AD	Teachers Program	0.10				0.10
2.1 Program Management	2.1.4 Education & Outreach	**US Total**				**1.20**	**0.00**	**0.34**		**1.54**
2.1 Program Management	2.1.4 Education & Outreach	UU	KE	HALLGREN, ALLAN	Education & Outreach				0.05	0.05
2.1 Program Management	2.1.4 Education & Outreach	UU	KE	BOTNER, OLGA	Education & Outreach				0.05	0.05
2.1 Program Management	2.1.4 Education & Outreach	SU	KE	HULTH, PER OLOF	Organisation of outreach events in Stockholm				0.05	0.05
2.1 Program Management	2.1.4 Education & Outreach	SKKU	KE	ROTT, CARSTEN	Education & Outreach				0.05	0.05
2.1 Program Management	2.1.4 Education & Outreach	**Non-US Total**							0.20	0.20
2.1 Program Management	**2.1.4 Education & Outreach**					**1.20**	**0.00**	**0.34**	**0.20**	**1.74**
2.1 Program Management	**WBS L2 Total**					**6.91**	**0.70**	**2.77**	**5.40**	**15.78**
2.2 Detector Operations & Maintenan	2.2 Detector Operations & Maintenance	LBNL	KE	NYGREN,DAVID R	Track Engine Trigger			0.10		0.10
2.2 Detector Operations & Maintenan	2.2 Detector Operations & Maintenance	UW	SC	KELLEY, JOHN	Detector Maintenance and Operations Manager	0.70				0.70
2.2 Detector Operations & Maintenan	2.2 Detector Operations & Maintenance	UMD	SC	OLIVAS, ALEX	Support Detector M&O			0.05		0.05
2.2 Detector Operations & Maintenan	2.2 Detector Operations & Maintenance	**US Total**				**0.70**	**0.00**	**0.15**		**0.85**
2.2 Detector Operations & Maintenan	2.2 Detector Operations & Maintenance	UMH	GR	KOHNEN, GEORGES	Database Coordinator				0.10	0.10
2.2 Detector Operations & Maintenan	2.2 Detector Operations & Maintenance	**Non-US Total**							0.10	0.10
2.2 Detector Operations & Maintenan	**2.2 Detector Operations & Maintenance**					**0.70**	**0.00**	**0.15**	**0.10**	**0.95**
2.2 Detector Operations & Maintenan	2.2.1 Run Coordination	UW	IT	Auer, Ralf	Winterovers coordinator, hiring and training of	0.25				0.25
2.2 Detector Operations & Maintenan	2.2.1 Run Coordination	UW	PO	KAUER, MATTHEW	Run Coordinator	0.40				0.40
2.2 Detector Operations & Maintenan	2.2.1 Run Coordination	UW	WO	UW Winter Overs	Operate Detector (Winter-Overs)	3.00				3.00
2.2 Detector Operations & Maintenan	2.2.1 Run Coordination	**US Total**				**3.65**	**0.00**	**0.00**	**0.00**	**3.65**
2.2 Detector Operations & Maintenan	2.2.1 Run Coordination	**Non-US Total**							**0.00**	**0.00**
2.2 Detector Operations & Maintenan	**2.2.1 Run Coordination**					**3.65**	**0.00**	**0.00**	**0.00**	**3.65**
2.2 Detector Operations & Maintenan	2.2.2 Data Acquisition	LBNL	EN	STEZELBERGER,THORSTEN	Maintain DAQ Hardware (Hubs, DOR, Clocks,	0.15				0.15
2.2 Detector Operations & Maintenan	2.2.2 Data Acquisition	UD	KE	SECKEL, DAVID	DAQ Monitoring			0.05		0.05

WBS L2	WBS L3	Institution	Lab or Cat.	Names	Tasks	NSF M&O Core	NSF Base Grants	U.S. Institutional In-Kind	Europe & Asia Pacific In-Kind	Grand Total
2.2 Detector Operations & Maintenan	2.2.2 Data Acquisition	UW	SC	KELLEY, JOHN	DOM software: DOR device driver, DOMHub scripts, DOMCal	0.10				0.10
2.2 Detector Operations & Maintenan	2.2.2 Data Acquisition	UW	SC	KELLEY, JOHN	Track DOM issues, generate detector run configurations	0.10				0.10
2.2 Detector Operations & Maintenan	2.2.2 Data Acquisition	UW	CS	FRERE, MICHAEL	Maintain DAQ Software Systems (IceCube Live) and track changes with	1.00				1.00
2.2 Detector Operations & Maintenan	2.2.2 Data Acquisition	UW	CS	GLOWACKI, DAVID	Maintain DAQ Software Systems (incl. triggers, up to Event Builder) and track	1.00				1.00
2.2 Detector Operations & Maintenan	2.2.2 Data Acquisition	UW	CS	UW CS	Maintain DAQ Software Systems experiment control and monitoring, DOM and DOMhub	0.75				0.75
2.2 Detector Operations & Maintenan	2.2.2 Data Acquisition	UW	CS	UW CS	Maintain low-level DAQ software (DOR device	0.15				0.15
2.2 Detector Operations & Maintenan	2.2.2 Data Acquisition	**US Total**				**3.25**	**0.00**	**0.05**		**3.30**
2.2 Detector Operations & Maintenan	2.2.2 Data Acquisition	ULB	GR	HEEREMAN, DAVID	Develop Hit Spooling for Supernova & others				0.50	0.50
2.2 Detector Operations & Maintenan	2.2.2 Data Acquisition	ULB	GR	PINAT, ELISA	Data Acquisition				0.50	0.50
2.2 Detector Operations & Maintenan	2.2.2 Data Acquisition	VUB	GR	DeWasseige, Gwen	Detector Noise Studies				0.00	0.00
2.2 Detector Operations & Maintenan	2.2.2 Data Acquisition	**Non-US Total**							**1.00**	**1.00**
2.2 Detector Operations & Maintenan	**2.2.2 Data Acquisition**					**3.25**	**0.00**	**0.05**	**1.00**	**4.30**
2.2 Detector Operations & Maintenan	2.2.3 Online Filter (Pnf)	UMD	SC	BLAUFUSS, ERIK	Maintain PnF S/W and Online Filters	0.20				0.20
2.2 Detector Operations & Maintenan	2.2.3 Online Filter (Pnf)	UMD	CS	Schmidt, Torsten	Maintain PnF Software and Online Filters	0.30				0.30
2.2 Detector Operations & Maintenan	2.2.3 Online Filter (Pnf)	UMD	GR	RICHMAN, MIKE	Online Filter Testing		0.13			0.13
2.2 Detector Operations & Maintenan	2.2.3 Online Filter (Pnf)	**US Total**				**0.50**	**0.13**	**0.00**		**0.63**
2.2 Detector Operations & Maintenan	**2.2.3 Online Filter (Pnf)**					**0.50**	**0.13**	**0.00**		**0.63**
2.2 Detector Operations & Maintenan	2.2.4 Sps Operations	UW	IT	Auer, Ralf	Maintain South Pole Computing H/W	0.50				0.50
2.2 Detector Operations & Maintenan	2.2.4 Sps Operations	UW	IT	WISNIEWSKI, PAUL	Networking and Security Maintenance	0.25				0.25
2.2 Detector Operations & Maintenan	2.2.4 Sps Operations	**US Total**				**0.75**	**0.00**	**0.00**		**0.75**
2.2 Detector Operations & Maintenan	**2.2.4 Sps Operations**					**0.75**	**0.00**	**0.00**		**0.75**
2.2 Detector Operations & Maintenan	2.2.5 Spts Operations	UW	IT	Auer, Ralf	Maintain South Pole Computing H/W	0.25				0.25
2.2 Detector Operations & Maintenan	2.2.5 Spts Operations	**US Total**				**0.25**	**0.00**	**0.00**	**0.00**	**0.25**
2.2 Detector Operations & Maintenan	**2.2.5 Spts Operations**					**0.25**	**0.00**	**0.00**		**0.25**
2.2 Detector Operations & Maintenan	2.2.6 Experiment Control	UW	CS	UW CS	IceCube Live Maintenance and Upgrades	0.65				0.65
2.2 Detector Operations & Maintenan	2.2.6 Experiment Control	**US Total**				**0.65**	**0.00**	**0.00**		**0.65**
2.2 Detector Operations & Maintenan	**2.2.6 Experiment Control**					**0.65**	**0.00**	**0.00**		**0.65**
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	CAU	KE	JAPARIDZE, GEORGE	Monitoring shifts				0.02	0.02
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	GTECH	GR	CASEY, JAMES	Monitoring shifts		0.03			0.03
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	KU	KE	BESSON, DAVE	Monitoring shifts				0.02	0.02
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	SBU	KE	KIRYLUK,JOANNA	BadDoms				0.05	0.05
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	SBU	PO	LESIAK-BZDAK, MARIOLA	Detector Monitoring					0.00
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	SBU	GR	YIQIAN XU	Detector Monitoring		0.05			0.05
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	SBU	GR	NIEDERHAUSEN, HANS	Moni 2.0 software development		0.15			0.15
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	LBNL	PO	CHANG, HYON HA	Monitoring shifts		0.09			0.09
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	PSU	PO	ARLEN, TIM	Monitoring shifts		0.03			0.03
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	PSU	GR	HUANG, FEIFEI	Monitoring shifts		0.03			0.03

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2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	SUBR	KE	TER-ANTONYAN, SAMVEL	Detector Monitoring				0.02	0.02
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	SDSMT	KE	XINHUA, BAI	Monitoring shifts			0.02		0.02
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	UA	PO	PALCZEWSKI, TOMASZ	Monitoring shifts		0.05			0.05
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	UAA	KE	RAWLINS, KATHERINE	Monitoring shifts			0.02		0.02
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	UCB	SC	FILIMONOV, KIRILL	Coordinate Monitoring		0.25			0.25
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	UCB	SC	FILIMONOV, KIRILL	Coordinate Monitoring	0.25				0.25
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	UCB	SC	UCB SC	Monitoring shifts		0.02			0.02
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	UCI	KE	BARWICK, STEVE	Monitoring shifts			0.01		0.01
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	UCI	GR	HANSON, JORDAN	Monitoring shifts			0.01		0.01
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	UMD	GR	UMD GR	Monitoring shifts		0.06			0.06
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	UW	PO	UW PO	Monitoring shifts		0.08			0.08
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	UW	GR	UW GR	Monitoring shifts		0.12			0.12
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	**US Total**				**0.25**	**0.96**	**0.16**		**1.37**
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	CHIBA	GR	CHIBA GR	Detector Monitoring				0.03	0.03
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	DESY	SC	DESY SC	Detector Monitoring				0.05	0.05
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	DESY	GR	DESY GR	Detector Monitoring				0.12	0.12
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	DTMND	GR	DTMD GR	Detector Monitoring				0.03	0.03
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	TUM	GR	MPI GR	Detector Monitoring				0.05	0.05
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	RWTH	GR	BLUMENTHAL, JAN	Monitoring contact				0.05	0.05
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	RWTH	GR	PAUL, LARRISA	RASTA Data Monitoring				0.10	0.10
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	RWTH	GR	RWTH GR	Monitoring (4 weeks)				0.12	0.12
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	SKKU	GR	IN, SEONGJUN	Detector Monitoring				0.03	0.03
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	SU	KE	HULTH, PER OLOF	IceCube camera system events in Stockholm				0.10	0.10
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	SU	GR	SU GR	Detector Monitoring				0.06	0.06
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	UC	KE	ADAMS, JENNI	Detector Monitoring				0.05	0.05
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	ULB	GR	ULB GR	Detector Monitoring				0.12	0.12
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	UOX	KE	SARKAR, SUBIR	Detector Monitoring				0.02	0.02
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	UU	GR	STRÖM, RICKARD	Monitoring Shifts				0.03	0.03
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	UU	GR	UNGER, LISA	Tools development				0.10	0.10
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	UU	GR	TAAVOLA, HENRIC	Monitoring Shifts				0.03	0.03
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	VUB	PO	VUB PO	Monitoring shifts				0.06	0.06
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	VUB	GR	VUB GR	Monitoring shifts				0.06	0.06
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	WUPPERTAL	GR	WUPPERTAL GR	South Pole EMI Monitoring				0.15	0.15
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	WUPPERTAL	GR	WUPPERTAL GR	SPATS				0.35	0.35
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	MAINZ	GR	UM GR	Detector Monitoring				0.05	0.05
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	GENT	GR	UGENT GR	Detector Monitoring				0.03	0.03
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	DPNC	GR	ASEN, CHRISTOV	Detector Monitoring				0.10	0.10
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	DPNC	GR	RAAMEZ MOHAMED	Detector Monitoring				0.10	0.10
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	MAINZ	PO	BOSSER, SEBASTIAN	Monitoring development				0.20	0.20
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	BOCHUM	GR	KROLL, MIKE	Detector Monitoring				0.03	0.03
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	NBI	GR	LARSON, MICHAEL	Monitoring shifts				0.03	0.03
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	NBI	GR	MEDICI, MORTEN	Monitoring shifts				0.03	0.03
2.2 Detector Operations & Maintenan	2.2.7 Detector Monitoring	**Non-US Total**							**2.28**	**2.28**
2.2 Detector Operations & Maintenan	**2.2.7 Detector Monitoring**					**0.25**	**0.96**	**0.16**	**2.28**	**3.64**
2.2 Detector Operations & Maintenan	2.2.8 Detector Calibration	GTECH	GR	CASEY, JAMES	Cable shadowing		0.20			0.20
2.2 Detector Operations & Maintenan	2.2.8 Detector Calibration	UA	KE	WILLIAMS, DAWN	managing flasher runs coordinating low level	0.20				0.20
2.2 Detector Operations & Maintenan	2.2.8 Detector Calibration	UA	PO	PALCZEWSKI, TOMASZ	SPE recalibration		0.05			0.05
2.2 Detector Operations & Maintenan	2.2.8 Detector Calibration	UA	PO	PALCZEWSKI, TOMASZ	Domcal monthly vetting		0.10			0.10
2.2 Detector Operations & Maintenan	2.2.8 Detector Calibration	UA	GR	XU, DONGLIAN	Low-energy cascade calibration with flashers		0.10			0.10
2.2 Detector Operations & Maintenan	2.2.8 Detector Calibration	UA	GR	PEPPER, JAMES	IceCube Live C&V		0.05			0.05
2.2 Detector Operations & Maintenan	2.2.8 Detector Calibration	UW	SC	WENDT, CHRISTOPHER	Flasher output, flasher calibration	0.20				0.20

WBS L2	WBS L3	Institution	Lab or Cat.	Names	Tasks	NSF M&O Core	NSF Base Grants	U.S. Institutional In-Kind	Europe & Asia Pacific In-Kind	Grand Total
2.2 Detector Operations & Maintenan	2.2.8 Detector Calibration	UW	SC	WENDT, CHRISTOPHER	Absolute DOM sensitivity calibration (laboratory measurements)	0.40				0.40
2.2 Detector Operations & Maintenan	2.2.8 Detector Calibration	UW	SC	WENDT, CHRISTOPHER	DOM charge response, linearity, DOM calibration	0.20				0.20
2.2 Detector Operations & Maintenan	2.2.8 Detector Calibration	UW	SC	TOSI, DELIA	Absolute DOM sensitivity calibration (laboratory measurements)	0.30				0.30
2.2 Detector Operations & Maintenan	2.2.8 Detector Calibration	**US Total**				**1.30**	**0.50**	**0.00**		**1.80**
2.2 Detector Operations & Maintenan	2.2.8 Detector Calibration	**Non-US Total**							**0.00**	**0.00**
2.2 Detector Operations & Maintenan	**2.2.8 Detector Calibration**					**1.30**	**0.50**	**0.00**	**0.00**	**1.80**
2.2 Detector Operations & Maintenan	2.2.9 Icetop Operations	UD	SC	TILAV, SERAP	Coordinate IceTop Operations	1.00				1.00
2.2 Detector Operations & Maintenan	2.2.9 Icetop Operations	**US Total**				**1.00**	**0.00**	**0.00**		**1.00**
2.2 Detector Operations & Maintenan	**2.2.9 Icetop Operations**					**1.00**	**0.00**	**0.00**	**0.00**	**1.00**
2.2 Detector Operations & Maintenan	2.2.10 Supernova Operations	UW	GR	RIEDEL, BENEDIKT	Supernova DAQ		0.20			0.20
2.2 Detector Operations & Maintenan	2.2.10 Supernova Operations	Yale	KE	MARUYAMA, REINA	Supernova DAQ			0.05		0.05
2.2 Detector Operations & Maintenan	2.2.10 Supernova Operations	**US Total**				**0.00**	**0.00**	**0.05**	**0.00**	**0.05**
2.2 Detector Operations & Maintenan	2.2.10 Supernova Operations	MAINZ	GR	EBERHARD, BENJAMIN	SuperNova Operations				0.50	0.50
2.2 Detector Operations & Maintenan	2.2.10 Supernova Operations	MAINZ	GR	BAUM, VOLKER	SuperNova Operations				0.50	0.50
2.2 Detector Operations & Maintenan	2.2.10 Supernova Operations	**Non-US Total**							**1.00**	**1.00**
2.2 Detector Operations & Maintenan	**2.2.10 Supernova Operations**					**0.00**	**0.00**	**0.05**	**1.00**	**1.05**
2.2 Detector Operations & Maintena	**WBS L2 Total**					**12.30**	**1.59**	**0.41**	**4.38**	**18.67**
2.3 Computing And Data Managemen	2.3.1 Core Software	UMD	GR	HELLAUER, ROBERT	Core Software		0.13			0.13
2.3 Computing And Data Managemen	2.3.1 Core Software	UMD	CS	Schmidt, Torsten	Maintain Core Analysis Framework (IceTray)	0.50				0.50
2.3 Computing And Data Managemen	2.3.1 Core Software	UMD	CS	Straszheim, Troy	Maintain Core Analysis Framework (IceTray)	1.00				1.00
2.3 Computing And Data Managemen	2.3.1 Core Software	UMD	CS	UMD CS	Maintain Core Software	0.50				0.50
2.3 Computing And Data Managemen	2.3.1 Core Software	UMD	GR	MAUNU, RYAN	Detector R&D		0.25			0.25
2.3 Computing And Data Managemen	2.3.1 Core Software	UW	DH	DIAZ-VELEZ, JUAN CARLOS	Simulation production & data processing software framework (IceProd), and simulation programs (detector response)	0.80				0.80
2.3 Computing And Data Managemen	2.3.1 Core Software	UW	CS	Braun, Jim	Development of IceCube event viewer software	0.75				0.75
2.3 Computing And Data Managemen	2.3.1 Core Software	UW	CS	Braun, Jim	Software support, code	0.25				0.25
2.3 Computing And Data Managemen	2.3.1 Core Software	UW	DH	FADIRAN, OLADIPO	Maintain Data Processing	0.20				0.20
2.3 Computing And Data Managemen	2.3.1 Core Software	**US Total**				**4.00**	**0.38**	**0.00**		**4.38**
2.3 Computing And Data Managemen	2.3.1 Core Software	UU	SC	BOERSMA, DAVID	Maintain Reconstruction				0.10	0.10
2.3 Computing And Data Managemen	2.3.1 Core Software	**Non-US Total**							**0.10**	**0.10**
2.3 Computing And Data Managemen	**2.3.1 Core Software**					**4.00**	**0.38**	**0.00**	**0.10**	**4.48**
2.3 Computing And Data Managemen	2.3.2 Data Storage & Transfer	UW	DH	FADIRAN, OLADIPO	Transformation of Data for Long-Term Persistence and Archival. Maintain Data Warehouse	0.20				0.20
2.3 Computing And Data Managemen	2.3.2 Data Storage & Transfer	UW	IT	RICHARDS, JOHN	Maintain and Operate Data Storage Infrastructure	1.00				1.00
2.3 Computing And Data Managemen	2.3.2 Data Storage & Transfer	UW	IT	BELLINGER, JIM	Maintain and Operate Data Storage Infrastructure	0.75				0.75

WBS L2	WBS L3	Institution	Lab or Cat.	Names	Tasks	NSF M&O Core	NSF Base Grants	U.S. Institutional In-Kind	Europe & Asia Pacific In-Kind	Grand Total
2.3 Computing And Data Managemen	2.3.2 Data Storage & Transfer	UW	PO	WANDKOWSKY, NANCY	Analysis disk Data storage review, data filters		0.15			0.15
2.3 Computing And Data Managemen	2.3.2 Data Storage & Transfer	UW	CS	MEADE, PATRICK	Transfer Data from S. Pole to UW Data Warehouse and Archive at S. Pole. Maintain Data Transfer SW (SPADE). Maintain Data Warehouse Standards, Software (Ingest), Data Access (FTP), and Web Interface	0.50				0.50
2.3 Computing And Data Managemen	2.3.2 Data Storage & Transfer	**US Total**				**2.45**	**0.15**	**0.00**		**2.60**
2.3 Computing And Data Managemen	2.3.2 Data Storage & Transfer	DESY	GR	STOESSL, ACHIM	Data Storage & Transfer				0.10	0.10
2.3 Computing And Data Managemen	2.3.2 Data Storage & Transfer	**Non-US Total**							**0.10**	**0.10**
2.3 Computing And Data Managemen	**2.3.2 Data Storage & Transfer**					**2.45**	**0.15**	**0.00**	**0.10**	**2.70**
2.3 Computing And Data Managemen	2.3.3 Computing Resources	PSU	PO	JOAO PEDRO DE ANDRES	Coordination and Support for Grid and distributed computing	0.02				0.02
2.3 Computing And Data Managemen	2.3.3 Computing Resources	PSU	PO	ARLEN, TIM	Coordination and Support Grid distributed computing	0.23				0.23
2.3 Computing And Data Managemen	2.3.3 Computing Resources	SUBR	KE	TER-ANTONYAN, SAMVEL	LONI Grid computing			0.30		0.30
2.3 Computing And Data Managemen	2.3.3 Computing Resources	UMD	IT	UMD IT	Coordination and Support for Grid and distributed computing	0.25				0.25
2.3 Computing And Data Managemen	2.3.3 Computing Resources	UW	IT	STOCK, BEN	Maintain Data Center Infrastructure	1.00				1.00
2.3 Computing And Data Managemen	2.3.3 Computing Resources	UW	IT	Barnet, Steve	Maintain Core Computing Systems, Coordination Grid & distributed computing	1.00				1.00
2.3 Computing And Data Managemen	2.3.3 Computing Resources	UW	IT	BELLINGER, JIM	Maintain Core High Performance Computing Systems	0.25				0.25
2.3 Computing And Data Managemen	2.3.3 Computing Resources	UW	IT	BRIK, VLADIMIR	Maintain Core High Performance Computing Systems	0.50				0.50
2.3 Computing And Data Managemen	2.3.3 Computing Resources	UW	IT	WISNIEWSKI, PAUL	Maintain Data Center Networking and Security	0.75				0.75
2.3 Computing And Data Managemen	2.3.3 Computing Resources	UW	IT	BRIK, VLADIMIR	Maintain Data Center Infrastructure	0.50				0.50
2.3 Computing And Data Managemen	2.3.3 Computing Resources	**US Total**				**4.50**	**0.00**	**0.30**		**4.80**
2.3 Computing And Data Managemen	2.3.3 Computing Resources	DESY	IT	DESY IT	European Data Center - Distributed Computing and Labor				1.00	1.00
2.3 Computing And Data Managemen	2.3.3 Computing Resources	DESY	KE	ACKERMANN, MARKUS	DESY TIER-1 coordination				0.20	0.20
2.3 Computing And Data Managemen	2.3.3 Computing Resources	DTMND	SC	PIELOTH, DAMIAN	Coordinate GRID computing in Germany				0.25	0.25
2.3 Computing And Data Managemen	2.3.3 Computing Resources	UU	SC	BOERSMA, DAVID	Computing Resources				0.25	0.25
2.3 Computing And Data Managemen	2.3.3 Computing Resources	UMH	GR	KOHNEN, GEORGES	IC database management				0.30	0.30
2.3 Computing And Data Managemen	2.3.3 Computing Resources	**Non-US Total**							**2.00**	**2.00**
2.3 Computing And Data Managemen	**2.3.3 Computing Resources**					**4.50**	**0.00**	**0.30**	**2.00**	**6.80**
2.3 Computing And Data Managemen	2.3.4 Data Production Processing	GTECH	GR	DAUGHHETTEE, JACOB	online / L2 / L3 processing for low energy group		0.20			0.20

WBS L2	WBS L3	Institution	Lab or Cat.	Names	Tasks	NSF M&O Core	NSF Base Grants	U.S. Institutional In-Kind	Europe & Asia Pacific In-Kind	Grand Total
2.3 Computing And Data Management	2.3.4 Data Production Processing	UMD	PO	FELDE, JOHN	Implement near real time GRB analysis		0.40			0.40
2.3 Computing And Data Management	2.3.4 Data Production Processing	UW	CS	MEADE, PATRICK	Unpacking, Decoding & Calibration of Raw Data (Level1); Run Common Reconstructions on UW IceCube Compute Cluster (Level2)	0.50				0.50
2.3 Computing And Data Management	2.3.4 Data Production Processing	**US Total**				**0.50**	**0.60**	**0.00**		**1.10**
2.3 Computing And Data Management	2.3.4 Data Production Processing	**Non-US Total**							**0.00**	**0.00**
2.3 Computing And Data Management	**2.3.4 Data Production Processing**					**0.50**	**0.60**	**0.00**	**0.00**	**1.10**
2.3 Computing And Data Management	2.3.5 Simulation Production	LBNL	PO	CHANG, HYON HA	Simulation Production on PDSF		0.20			0.20
2.3 Computing And Data Management	2.3.5 Simulation Production	PSU	PO	ARLEN, TIM	Simulation Production		0.08			0.08
2.3 Computing And Data Management	2.3.5 Simulation Production	PSU	PO	JOAO PEDRO DE ANDRES	Simulation Production, IceSim vetting for LowEn	0.01				0.01
2.3 Computing And Data Management	2.3.5 Simulation Production	OSU	PO	SUTHERLAND, MICHAEL	Simulation Production			0.10		0.10
2.3 Computing And Data Management	2.3.5 Simulation Production	UMD	GR	CHEUNG, ELIM	Simulation Production coordination	0.10				0.10
2.3 Computing And Data Management	2.3.5 Simulation Production	UW	SC	DESIATI, PAOLO	Coordination of Simulation Production, identifying resources, streamlining programs for the cloud, GPU	0.40				0.40
2.3 Computing And Data Management	2.3.5 Simulation Production	UW	SC	DESIATI, PAOLO	Simulation Production panel chair			0.20		0.20
2.3 Computing And Data Management	2.3.5 Simulation Production	UW	PO	DAY, MELANIE	Low energy simulation production		0.25			0.25
2.3 Computing And Data Management	2.3.5 Simulation Production	UW	GR	MCNALLY, FRANK	IceTop Simulation ProductionProduction / Data Processing		0.30			0.30
2.3 Computing And Data Management	2.3.5 Simulation Production	UW	DH	SCHULTZ, DAVID	Simulation Production	1.00				1.00
2.3 Computing And Data Management	2.3.5 Simulation Production	**US Total**				**1.40**	**0.94**	**0.30**		**2.64**
2.3 Computing And Data Management	2.3.5 Simulation Production	DESY	GR	DESY GR	Simulation Production Cluster				0.15	0.15
2.3 Computing And Data Management	2.3.5 Simulation Production	DESY	SC	GORA, DARIUSZ	Simulation Production Cluster				0.20	0.20
2.3 Computing And Data Management	2.3.5 Simulation Production	DTMND	GR	ZIEMANN, JAN	Maintenance of the local IceCube MC Production				0.20	0.20
2.3 Computing And Data Management	2.3.5 Simulation Production	RWTH	GR	REIMAN, RENE	GPU Mass production on AC-RZ cluster				0.20	0.20
2.3 Computing And Data Management	2.3.5 Simulation Production	RWTH	GR	PAUL, LARRISA	Simulation Production on				0.10	0.10
2.3 Computing And Data Management	2.3.5 Simulation Production	RWTH	GR	VEHRING, MARKUS	Low energy Simulation				0.20	0.20
2.3 Computing And Data Management	2.3.5 Simulation Production	RWTH	GR	LEIF RADEL	Geant Simulations & Light				0.05	0.05
2.3 Computing And Data Management	2.3.5 Simulation Production	ULB	CS	AMARY, SAMIR	Computer Cluster - simulation				0.10	0.10
2.3 Computing And Data Management	2.3.5 Simulation Production	ALBERTA	KE	GRANT, DARREN	WestGrid computing				0.10	0.10
2.3 Computing And Data Management	2.3.5 Simulation Production	ALBERTA	KE	KOPPER, CLAUDIO	Simulation coordination board member				0.10	0.10
2.3 Computing And Data Management	2.3.5 Simulation Production	ALBERTA	KE	KOPPER, CLAUDIO	GPU computing resourses				0.10	0.10
2.3 Computing And Data Management	2.3.5 Simulation Production	ALBERTA	GR	NOWICKI, SARAH	Clsim photon table				0.35	0.35
2.3 Computing And Data Management	2.3.5 Simulation Production	WUPPERTAL	GR	WUPPERTAL GR	Simulation Production				0.20	0.20
2.3 Computing And Data Management	2.3.5 Simulation Production	CHIBA	KE	KEIICHI MASE	Generating background event simulation by				0.20	0.20

WBS L2	WBS L3	Institution	Lab or Cat.	Names	Tasks	NSF M&O Core	NSF Base Grants	U.S. Institutional In-Kind	Europe & Asia Pacific In-Kind	Grand Total
2.3 Computing And Data Management	2.3.5 Simulation Production	NBI	KE	KOSKINEN, JASON	Low-energy/PINGU Simulation				0.10	0.10
2.3 Computing And Data Management	2.3.5 Simulation Production	Toronto	KE	CLARK, KENNETH	SciNet computing				0.25	0.25
2.3 Computing And Data Management	2.3.5 Simulation Production	Toronto	KE	CLARK, KENNETH	GENIE maintenance				0.10	0.10
2.3 Computing And Data Management	2.3.5 Simulation Production	UMH	GR	KOHNEN, GEORGES	Simulation Production				0.25	0.25
2.3 Computing And Data Management	2.3.5 Simulation Production	**Non-US Total**							2.95	2.95
2.3 Computing And Data Management	**2.3.5 Simulation Production**					1.40	0.94	0.30	2.95	5.59
2.3 Computing And Data Management	**WBS L2 Total**					12.85	2.07	0.60	5.15	20.67
2.4 Triggering And Filtering	2.4.1 TFT Coordination	GTECH	KE	TABOADA, IGNACIO	TFT Board member	0.10				0.10
2.4 Triggering And Filtering	2.4.1 TFT Coordination	UA	KE	WILLIAMS, DAWN	TFT Board member			0.10		0.10
2.4 Triggering And Filtering	2.4.1 TFT Coordination	UD	KE	SECKEL, DAVID	TFT Board member			0.10		0.10
2.4 Triggering And Filtering	2.4.1 TFT Coordination	UW	PO	KAUER, MATTHEW	TFT Board member			0.10		0.10
2.4 Triggering And Filtering	2.4.1 TFT Coordination	UW	PO	KAUER, MATTHEW	Training and coordinating monitoring shifters	0.10				0.10
2.4 Triggering And Filtering	2.4.1 TFT Coordination	UMD	SC	BLAUFUSS, ERIK	Filter requests, bandwidth, TFT Board Member	0.30				0.30
2.4 Triggering And Filtering	2.4.1 TFT Coordination	PSU	GR	HUANG, FEIFEI	Study PINGU/HEX hardware requirements using IceCube data &		0.47			0.47
2.4 Triggering And Filtering	2.4.1 TFT Coordination	UMD	GR	HELLAUER, ROBERT	Prepare datasets for filter testing and common MC datasets for testing		0.10			0.10
2.4 Triggering And Filtering	2.4.1 TFT Coordination	**US Total**				0.40	0.67	0.30		1.37
2.4 Triggering And Filtering	2.4.1 TFT Coordination	ALBERTA	KE	GRANT, DARREN	TFT Board member				0.10	0.10
2.4 Triggering And Filtering	2.4.1 TFT Coordination	ALBERTA	KE	KOPPER, CLAUDIO	L2 manager				0.10	0.10
2.4 Triggering And Filtering	2.4.1 TFT Coordination	DESY	KE	KARG, TIMO	TFT Board member				0.10	0.10
2.4 Triggering And Filtering	2.4.1 TFT Coordination	UU	KE	HALLGREN, ALLAN	TFT Board Chair				0.25	0.25
2.4 Triggering And Filtering	2.4.1 TFT Coordination	UU	KE	DE LOS HEROS, CARLOS	TFT Board member				0.10	0.10
2.4 Triggering And Filtering	2.4.1 TFT Coordination	**Non-US Total**							0.65	0.65
2.4 Triggering And Filtering	**2.4.1 TFT Coordination**					0.40	0.67	0.30	0.65	2.02
2.4 Triggering And Filtering	2.4.2 Physics Filters	UA	KE	WILLIAMS, DAWN	Tau WG Chair			0.25		0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	UD	KE	GONZALEZ, JAVIER	Physics filters		0.10			0.10
2.4 Triggering And Filtering	2.4.2 Physics Filters	SBU	KE	KIRYLUK, JOANNA	Cascade WG Co-Chair			0.25		0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	LBNL	PO	CHANG, HYON HA	L2 processing for IC86, studying cascade energy resolution		0.25			0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	MSU	KE	DEYOUNG, TYCE	Oscillations WG - Co Chair			0.15		0.15
2.4 Triggering And Filtering	2.4.2 Physics Filters	UCB	SC	WOSCHNAGG, KURT	Oscillations WG chair			0.25		0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	GTECH	KE	TABOADA, IGNACIO	GRB WG Chair			0.25		0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	UMD	PO	FELDE, JOHN	GRB filters		0.25			0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	SBU	PO	LESIAK-BZDAK, MARIOLA	Cascade filters					0.00
2.4 Triggering And Filtering	2.4.2 Physics Filters	SBU	GR	NIEDERHAUSEN, HANS	Low Energy		0.10			0.10
2.4 Triggering And Filtering	2.4.2 Physics Filters	SBU	GR	YIQIAN XU	Cascade filters		0.15			0.15
2.4 Triggering And Filtering	2.4.2 Physics Filters	UW	GR	FAHEY, SAM	Trigger simulations			0.20		0.20
2.4 Triggering And Filtering	2.4.2 Physics Filters	UWRF	KE	SEUNARINE, SURUJ	Calibration-Flasher Studies			0.20		0.20
2.4 Triggering And Filtering	2.4.2 Physics Filters	**US Total**				0.00	1.35	1.05	0.00	2.40
2.4 Triggering And Filtering	2.4.2 Physics Filters	SU	KE	BOHM, CHRISTIAN	Track engine				0.10	0.10
2.4 Triggering And Filtering	2.4.2 Physics Filters	BOCHUM	GR	BOS, FABIAN	Moon filter				0.10	0.10
2.4 Triggering And Filtering	2.4.2 Physics Filters	CHIBA	SC	ISHIHARA, AYA	Diffuse WG co-chair				0.25	0.25

IceCube M&O Staffing Matrix sort by WBS v17.0 2014.0915.xls

WBS L2	WBS L3	Institution	Lab or Cat.	Names	Tasks	NSF M&O Core	NSF Base Grants	U.S. Institutional In-Kind	Europe & Asia Pacific In-Kind	Grand Total
2.4 Triggering And Filtering	2.4.2 Physics Filters	CHIBA	SC	ISHIHARA, AYA	EHE Filters				0.15	0.15
2.4 Triggering And Filtering	2.4.2 Physics Filters	DESY	KE	KARG, TIMO	CR WG co-chair				0.25	0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	DESY	SC	GORA, DARIUSZ	Online Filter Alerts / NToO program				0.15	0.15
2.4 Triggering And Filtering	2.4.2 Physics Filters	HUMBOLDT	GR	VOGE, MARKUS	Online L2 Filter, single event stream				0.20	0.20
2.4 Triggering And Filtering	2.4.2 Physics Filters	HUMBOLDT	GR	STASIK, ALEXANDER	Alert System for follow-up				0.30	0.30
2.4 Triggering And Filtering	2.4.2 Physics Filters	UC	GR	MUNAWARA, KIRAN	Cascade filters				0.20	0.20
2.4 Triggering And Filtering	2.4.2 Physics Filters	UC	GR	BAGHERPOUR, HADIS	Cascade filters				0.20	0.20
2.4 Triggering And Filtering	2.4.2 Physics Filters	UU	SC	BOERSMA, DAVID	Maintain Moon shadow and Galactic center filters				0.05	0.05
2.4 Triggering And Filtering	2.4.2 Physics Filters	SKKU	KE	ROTT, CARSTEN	BSM WG Co-Chair				0.25	0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	SKKU	GR	IN, SEONGJUN	Online filter development & testing				0.20	0.20
2.4 Triggering And Filtering	2.4.2 Physics Filters	SU	KE	FINLEY, CHAD	Point Source WG Chair				0.25	0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	SU	KE	HULTQVIST, KLAS	Diffuse WG Co-chair				0.25	0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	SU	PO	DUMM, JONATHAN	Online filter				0.20	0.20
2.4 Triggering And Filtering	2.4.2 Physics Filters	SU	GR	ZOLL, MARCEL	Filters and Simulations				0.25	0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	SU	GR	AHRENS, MARYON	PhD-related work				0.10	0.10
2.4 Triggering And Filtering	2.4.2 Physics Filters	UU	KE	DE LOS HEROS, CARLOS	WIMP WG Chair				0.25	0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	VUB	GR	KUNNEN JAN	Filter for mow energy muons				0.50	0.50
2.4 Triggering And Filtering	2.4.2 Physics Filters	DTMND	KE	RUHE, TIM	Physics filters				0.20	0.20
2.4 Triggering And Filtering	2.4.2 Physics Filters	DTMND	GR	SCHMITZ, MARTIN	Physics filters				0.20	0.20
2.4 Triggering And Filtering	2.4.2 Physics Filters	DTMND	GR	SCHERIAU, FLORIAN	Physics filters				0.20	0.20
2.4 Triggering And Filtering	2.4.2 Physics Filters	WUPPERTAL	KE	HELBING, KLAUS	Exotics- WG chair				0.25	0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	WUPPERTAL	GR	WUPPERTAL GR	New SUSY Filter				0.20	0.20
2.4 Triggering And Filtering	2.4.2 Physics Filters	RWTH	GR	LEIF RADEL	L3 IC86-1/2 diffuse data stream				0.20	0.20
2.4 Triggering And Filtering	2.4.2 Physics Filters	DPNC	PO	AGUILAR SANCHEZ JUAN ANTONIO	Muon filter responsible for 2014, Online filtering				0.10	0.10
2.4 Triggering And Filtering	2.4.2 Physics Filters	DPNC	PO	AGUILAR SANCHEZ JUAN ANTONIO	Muon working group co-Chair				0.25	0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	DPNC	PO	VALLECORSA, SOFIA	DeepCore filtering				0.20	0.20
2.4 Triggering And Filtering	2.4.2 Physics Filters	DPNC	GR	ASEN, CHRISTOV	Online filtering				0.20	0.20
2.4 Triggering And Filtering	2.4.2 Physics Filters	DPNC	GR	RAAMEZ MOHAMED	Muon/WIMPs/Low Up Filter				0.20	0.20
2.4 Triggering And Filtering	2.4.2 Physics Filters	NBI	KE	KOSKINEN, JASON	Low-energy WG Co-Chair				0.25	0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	**Non-US Total**							6.65	6.65
2.4 Triggering And Filtering	**2.4.2 Physics Filters**					0.00	1.35	1.05	6.65	9.05
2.4 Triggering And Filtering	**WBS L2 Total**					0.40	2.02	1.35	7.30	11.07
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	LBNL	PO	CHANG, HYON HA	DOM simulator & calibrator		0.10			0.10
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	LBNL	PO	CHANG, HYON HA	Simulation Programs: cmc		0.10			0.10
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	SDSMT	KE	XINHUA, BAI	Muon yield in EeV showers & comparison w/ theoretical calculations				0.14	0.14
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	SDSMT	GR	DVORAK, EMILY	Atmospheric muon & neutrino simulation for cosmic ray & neutrino studies				0.25	0.25
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	SUBR	KE	FAZELY, ALI	GEANT Simulation			0.15		0.15
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	SUBR	SC	XIANWU, XU	Simulation Programs			0.15		0.15
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	OSU	PO	STAMATIKOS, MICHAEL	GRB Analysis Tools			0.05		0.05
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	UA	PO	PALCZEWSKI, TOMASZ	Ice simulation		0.35			0.35

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WBS L2	WBS L3	Institution	Lab or Cat.	Names	Tasks	NSF M&O Core	NSF Base Grants	U.S. Institutional In-Kind	Europe & Asia Pacific In-Kind	Grand Total
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	UA	GR	PEPPER, JAMES	Dark Matter signal simulation		0.15			0.15
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	UCB	SC	WOSCHNAGG, KURT	Maintain and Verify Simulation of Photon Propagation and update Ice Properties	0.50				0.50
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	UD	PO	GONZALEZ, JAVIER	Simulations		0.10			0.10
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	UD	PO	DEMBINSKI, HANS	Simulations		0.25			0.25
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	UD	GR	PANDYA, HERSHAL	Simulation Programs: sim-services		0.10			0.10
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	UD	GR	KOIRALA, RAMESH	Simulation Programs: sim-services		0.10			0.10
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	UMD	SC	OLIVAS, ALEX	Simulation Software Programs coordinator	0.75				0.75
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	UMD	GR	RICHMAN, MIKE	Maintain Detector Simulation (IceSim)		0.13			0.13
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	UW	SC	CHIRKIN, DMITRY	Maintain and Verify Simulation of Photon Propagation and update Ice Properties	0.35				0.35
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	UW	SC	HOSHINA, KOTOYO	nugen maintenance	0.25				0.25
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	UW	GR	VAN SANTEN, JACOB	Muongun		0.20			0.20
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	UW	GR	JERO, KYLE	Veto simulation		0.20			0.20
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	UW	GR	McNALLY, FRANK	IceTop simulation production/data processing		0.20			0.20
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	UW	DH	DIAZ-VELEZ, JUAN CARLOS	Maintain Simulation Production Software, maintain, test and update physics aspects of the atmospheric muon and neutrino simulation	0.20				0.20
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	Yale	KE	MARUYAMA, REINA	Supernova simulation tools			0.05		0.05
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	**US Total**				**2.05**	**1.98**	**0.79**		**4.82**
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	DTMND	GR	FACHS, THOMAS	PROPOSAL-IceProd integration and maintenance/support				0.50	0.50
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	SU	GR	FLIS, SAMUEL	DOM simulation				0.15	0.15
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	UOX	KE	SARKAR, SUBIR	Yellow Book-maintenance				0.10	0.10
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	GENT	GR	UGENT GR	Support IceTop Simulations, IceTop Calibrations, IceTop Reconstruction				0.40	0.40
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	BOCHUM	KE	TJUS, JULIA	Development PROPOSAL simulation software				0.10	0.10
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	BOCHUM	GR	SCHöNEBERG, SEBASTIAN	Developing / maintaining ANFlux				0.10	0.10
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	NBI	GR	LARSON, MICHAEL	Correlated noise and long-frame CORSIKA				0.15	0.15
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	NBI	GR	LARSON, MICHAEL	PINGU CORSIKA				0.10	0.10
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	NBI	GR	MEDICI, MORTEN	DOM noise and quantum efficiency				0.15	0.15
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	ERLANGEN	GR	CLASSEN, LEW	multi-PMT DOM development and simulations				0.40	0.40
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	HUMBOLDT	KE	KOWALSKI, MAREK	Simulation tools				0.05	0.05

WBS L2	WBS L3	Institution	Lab or Cat.	Names	Tasks	NSF M&O Core	NSF Base Grants	U.S. Institutional In-Kind	Europe & Asia Pacific In-Kind	Grand Total
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	RWTH	GR	SEBASTIAN SCHÖNEN	Global Likelihood Fits, KDE-tools				0.10	0.10
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	RWTH	GR	SCHOENEN, SEBASTIAN	Global Likelihood Fits, KDE-tools				0.10	0.10
2.5 Data Quality, Reconstruction & Si	2.5.1 Simulation Programs	**Non-US Total**							2.40	2.40
2.5 Data Quality, Reconstruction & Si	**2.5.1 Simulation Programs**					**2.05**	**1.98**	**0.79**	**2.40**	**7.22**
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	LBNL	GR	MIARECKI, SANDRA	Algorithm for measuring muon energy		0.25			0.25
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	LBNL	GR	BINDER, GARY	PMT saturation corrections for analysis		0.50			0.50
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	PSU	PO	JOAO PEDRO DE ANDRES	Low energy reconstruction techniques for DeepCore		0.01			0.01
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	PSU	PO	ARLEN, TIM	Develop analysis tools for systematics study		0.20			0.20
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	PSU	GR	KEIVANI, AZADEH	Integrate IceCube into AMON			0.25		0.25
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	SUBR	KE	FAZELY, ALI	Reconstruction/ Analysis tools			0.15		0.15
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	SUBR	SC	XIANWU, XU	Reconstruction/ Analysis tools			0.15		0.15
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	UA	KE	TOALE, PATRICK	Double cascade fitter			0.05		0.05
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	UA	GR	XU, DONGLIAN	Improvements to low energy analysis framework		0.10			0.10
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	UD	PO	GONZALEZ, JAVIER	Event reconstruction		0.25			0.25
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	UD	PO	DEMBINSKI, HANS	Event reconstruction		0.10			0.10
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	UAA	KE	RAWLINS, KATHERINE	Laputop and software development; Snow correction for IceTop			0.30		0.30
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	UMD	PO	FELDE, JOHN	Develop & test reconstruction		0.25			0.25
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	UMD	GR	RICHMAN, MIKE	Reconstruction/ Analysis tools		0.13			0.13
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	UMD	GR	CHEUNG, ELIM	Low energy Reco./Analysis tools		0.25			0.25
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	SBU	GR	NIEDERHAUSEN, HANS	Cascade reconstruction		0.05			0.05
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	SBU	GR	YIQIAN XU	Flashers/Standard Candle		0.10			0.10
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	UW	SC	CHIRKIN, DMITRY	Reconstruction software	0.15				0.15
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	UW	SC	CHIRKIN, DMITRY	Direct photon tracking / iceproperties calibration; FE/pulse extractor; reco S/W		0.15			0.15
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	UW	GR	GLADSTONE, LAURA	Reconstruction tools-Deep Core		0.15			0.15
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	UW	GR	FEINTZIG, JACOB	Event reconstruction (spline fits)		0.10			0.10
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	UW	GR	VAN SANTEN, JACOB	Cascades		0.15			0.15
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	UW	GR	JERO, KYLE	Event reconstruction, angular resolution		0.20			0.20
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	UW	GR	SABBATINI, LUCA	Shower reconstruction, flasher data		0.30			0.30
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	UW	GR	TOBIN, MORIAH	Low energy event reconstruction (BiPed), spline service		0.30			0.30
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	UW	GR	MIDDLEMAS, ERIN	Cascade event reconstruction		0.30			0.30

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2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	UW	GR	GHORBANI, KEVIN	Muon energy loss		0.20			0.20
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	UW	GR	ALSUM, SHAUN	Calibration, investigate ice and geometry using muons		0.30			0.30
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	UWRF	KE	MADSEN, JIM	Low-energy IceTop Extensions			0.10		0.10
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	UWRF	KE	SEUNARINE, SURUJ	Low-Energy Extensions of IceTop			0.10		0.10
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	Yale	KE	MARUYAMA, REINA	Coincident events between IceCube and DM-Ice			0.05		0.05
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	Yale	GR	HUBBARD, ANTONIA	Coincident events between IceCube and DM-Ice,			0.25		0.25
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	**US Total**				0.15	4.34	1.40		**5.89**
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	ADELAIDE	KE	HILL, GARY	Event energy and direction reconstruction, millipede				0.40	0.40
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	ADELAIDE	PO	WHELAN, BEN	Event energy and direction reconstruction, millipede				1.00	1.00
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	ADELAIDE	GR	AARTSEN, MARK	Event energy and direction reconstruction, millipede				0.50	0.50
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	ALBERTA	GR	WOOD, TANIA	Calibrations with LED and minimum ionizing muons				0.35	0.35
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	UC	GR	MUNAWARA, KIRAN	Flasher				0.10	0.10
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	CHIBA	KE	YOSHIDA, SHIGERU	Maintain Romeo, EHE Simulations, Calibration using Standard Candles				0.20	0.20
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	CHIBA	KE	KEIICHI MASE	Maintain Romeo, EHE Simulations, Maintain reconstruction projects (Portia), MC/Data comparison for EHE-filtered and IceTop events, Standard Candle Analysis				0.20	0.20
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	CHIBA	SC	ISHIHARA, AYA	Maintain Portia and the SC data filtering				0.15	0.15
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	CHIBA	PO	RELICH, MATTHEW	Standard Candle data analysis for calibrating DOM and ice				0.15	0.15
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	CHIBA	PO	GAIOR, ROMAIN	EHE online pipeline for gamma-ray follow-up				0.15	0.15
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	CHIBA	GR	CHIBA GR	Improve the Ice Model, Afterpulse Simulator, Standard Candle Analysis, Maintain reconstruction projects (Ophelia, ehe-star)				0.20	0.20
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	DESY	SC	YANEZ, JUAN-PABLO	Low-energy reconstruction				0.10	0.10
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	DESY	GR	MOHRMANN, LARS	Likelihood fit package				0.10	0.10
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	DESY	GR	KINTSCHER, THOMAS	Gamma-ray follow up program maintenance				0.10	0.10
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	DESY	GR	TERLIUK, ANDRII	DeepCore/PINGU reconstruction				0.20	0.20

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2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	UU	SC	BOERSMA, DAVID	Reconstruction Coordinator				0.20	0.20
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	RWTH	GR	BLUMENTHAL, JAN	IceCube integration in Fittino/Astrofit				0.10	0.10
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	RWTH	GR	VEHRING, MARKUS	Genie MC development & data production				0.20	0.20
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	RWTH	GR	WALLRAFF, MARIUS	nuCraft				0.20	0.20
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	RWTH	GR	LEUERMANN, MARTIN	Finite track reconstruction, PegLeg Reconstruction				0.20	0.20
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	SKKU	PO	BOSE, DEBANJAN	Photon tracking / ice-properties calibration				0.20	0.20
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	SU	GR	WOLF, MARTIN	STTools, EventViewer				0.20	0.20
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	VUB	KE	VAN EIJNDHOVEN, NICK	development of reconstruction tools (IcePack framework)				0.25	0.25
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	VUB	PO	DE VRIES, KRIJN	muon track reconstruction in IceCube and DeepCore				0.25	0.25
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	VUB	PO	Lünemann, Jan	Low energy muon reconstruction				0.25	0.25
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	VUB	GR	MAGGI, GIULIANO	muon track reconstruction in IceCube and DeepCore				0.25	0.25
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	VUB	PO	GOLUP, GERALDINA	muon track reconstruction for IceCube and DeepCore				0.25	0.25
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	VUB	GR	CASIER MARTIN	muon track reconstruction in IceCube and DeepCore				0.50	0.50
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	VUB	GR	BRAYEUR LIONEL	muon track reconstruction in IceCube and DeepCore				0.50	0.50
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	ALBERTA	KE	GRANT, DARREN	Maintenance of IceCube-Photonics interface				0.10	0.10
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	ALBERTA	KE	KOPPER, CLAUDIO	Icetray framework maintenance				0.05	0.05
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	ALBERTA	KE	KOPPER, CLAUDIO	Maintenance of clsim direct photon propagation tool				0.10	0.10
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	WUPPERTAL	GR	WUPPERTAL GR	New SUSY Reconstruction, Simulation, Propagation, Monopole, Photonics, muon detection with IceTop				0.60	0.60
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	MAINZ	GR	WIEBE, KLAUS	Angular res. Cascades				0.20	0.20
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	MAINZ	GR	SCHATTO, KAI	Angular res. Cascades				0.10	0.10
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	HUMBOLDT	GR	DE WITH, MEIKE	Reconstruction Release Manager, Maintain Reconstruction Framework				0.25	0.25
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	ERLANGEN	GR	ALTMANN, DAVID	Track reconstruction				0.10	0.10
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	NBI	KE	KOSKINEN, JASON	DeepCore Veto				0.10	0.10
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	NBI	GR	MEDICI, MORTEN	Low-energy reco for DM searches				0.10	0.10
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	NBI	GR	SANDROOS, JOAKIM	Atmospheric neutrino flux				0.60	0.60

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2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	Toronto	KE	CLARK, KENNETH	Development of low-energy reconstruction techniques				0.10	0.10
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	HUMBOLDT	GR	USNER, MARCEL	Spline fits with anisotropy				0.30	0.30
2.5 Data Quality, Reconstruction & Si	2.5.2 Reconstruction/ Analysis Tools	**Non-US Total**							10.15	10.15
2.5 Data Quality, Reconstruction & Si	**2.5.2 Reconstruction/ Analysis Tools**					0.15	4.34	1.40	10.15	16.04
2.5 Data Quality, Reconstruction & Si	2.5.3 Data Quality	**US Total**				0.00	0.00	0.00		0.00
2.5 Data Quality, Reconstruction & Si	2.5.3 Data Quality	TUM	PO	MPI PO	Data Quality & DeepCore				0.60	0.60
2.5 Data Quality, Reconstruction & Si	2.5.3 Data Quality	DPNC	KE	MONTARULI, TERESA	Data and Simulation Quality				0.10	0.10
2.5 Data Quality, Reconstruction & Si	2.5.3 Data Quality	DPNC	GR	ASEN, CHRISTOV	Data and Simulation Quality				0.30	0.30
2.5 Data Quality, Reconstruction & Si	2.5.3 Data Quality	DPNC	GR	RAAMEZ MOHAMED	Data and Simulation Quality				0.30	0.30
2.5 Data Quality, Reconstruction & Si	2.5.3 Data Quality	DPNC	PO	AGUILAR SANCHEZ JUAN ANTONIO	Data and Simulation Quality				0.15	0.15
2.5 Data Quality, Reconstruction & Si	2.5.3 Data Quality	DPNC	PO	VALLECORSA, SOFIA	Data and Simulation Quality for low energy searches				0.30	0.30
2.5 Data Quality, Reconstruction & Si	2.5.3 Data Quality	VUB	KE	VAN EIJNDHOVEN, NICK	data quality verification				0.25	0.25
2.5 Data Quality, Reconstruction & Si	2.5.3 Data Quality	VUB	PO	GOLUP, GERALDINA	GRB analysis				0.25	0.25
2.5 Data Quality, Reconstruction & Si	2.5.3 Data Quality	VUB	GR	MAGGI, GIULIANO	AGN analysis				0.25	0.25
2.5 Data Quality, Reconstruction & Si	2.5.3 Data Quality	VUB	PO	DE VRIES, KRIJN	GRB/AGN analysis				0.25	0.25
2.5 Data Quality, Reconstruction & Si	2.5.3 Data Quality	**Non-US Total**							2.75	2.75
2.5 Data Quality, Reconstruction & Si	**2.5.3 Data Quality**					0.00	0.00	0.00	2.75	2.75
2.5 Data Quality, Reconstruction & Si	2.5.4 Offline Data Processing	UW	DH	FADIRAN, OLADIPO	Simulation Production Coordination; production configurations, test production and web portal.	0.60				0.60
2.5 Data Quality, Reconstruction & Si	2.5.4 Offline Data Processing	UW	GR	FEINTZIG, JACOB	L2 processing, muon stream		0.10			0.10
2.5 Data Quality, Reconstruction & Si	2.5.4 Offline Data Processing	**US Total**				0.60	0.10	0.00		0.70
2.5 Data Quality, Reconstruction & Si	2.5.4 Offline Data Processing	**Non-US Total**							0.00	0.00
2.5 Data Quality, Reconstruction & Si	**2.5.4 Offline Data Processing**					0.60	0.10	0.00	0.00	0.70
2.5 Data Quality, Reconstruction &	**WBS L2 Total**					2.80	6.41	2.19	15.30	26.70
Grand Total						35.26	12.78	7.32	37.53	92.88