IceCube M&O Staffing Matrix sort by WBS v12.0 2012.0315

Cat.	Description	Cat.	Description	Cat.	Description	Cat.	Description
AD	Administration	GR	Graduate Student	PO	Postdoctoral Scientist	TE	Technician
CS	Computer Science Eng.	KE	Key Personnel/Faculty	SC	Scientist	WO	Winterover
EN	Engineer	MA	Management	SE	Senior Engineer		

WBS L2	WBS L3	Institution	Labor Cat.	Names	Tasks	NSF M&O Core	NSF Base Grants	U.S. IN-KIND	Non U.S. 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	Preparing 2012 Coll. Meeting			0.10		0.10
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	LBNL	KE	STOKSTAD, BOB	Preparing 2012 Coll. Meeting			0.10		0.10
2.1 Program Management	2.1.1 Administration	LBNL	GR	MIARECKI, SANDRA	Preparing 2012 Coll. Meeting		0.20			0.20
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	PSU	KE	COWEN, DOUG	ExecCom member			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	KE	PRICE, BUFORD	Education & Outreach			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	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	UMD	KE	SULLIVAN, GREG	Spokesperson	0.30				0.30
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	PO	WISSING, HENRIKE	Pubcom member		0.10			0.10
2.1 Program Management	2.1.1 Administration	StonyBrook	KE	KIRYLUK,JOANNA	Simulation Prod. Comm member			0.05		0.05
2.1 Program Management	2.1.1 Administration	UW	KE	HALZEN, FRANCIS	Principle Investigator	0.08				0.08
2.1 Program Management	2.1.1 Administration	UW	KE	HALZEN, FRANCIS	Principle Investigator			0.33		0.33
2.1 Program Management	2.1.1 Administration	UW	KE	KARLE, ALBRECHT	Associate Director for Science	0.08				0.08
2.1 Program Management	2.1.1 Administration	UW	KE	KARLE, ALBRECHT	Associate Director for Science			0.33		0.33
2.1 Program Management	2.1.1 Administration	UW	KE	YECK, JAMES	Director of Operations	0.50				0.50
2.1 Program Management	2.1.1 Administration	UW	SC	DESIATI, PAOLO	Pubcom member		0.10			0.10
2.1 Program Management	2.1.1 Administration	UW	MA	UW Manager	Computing Infrastructure Management	1.00				1.00
2.1 Program Management	2.1.1 Administration	UW	MA	PELES, ADI	Resource Coordinator	0.50				0.50
2.1 Program Management	2.1.1 Administration	UW	AD	Vakhnina, Catherine	Administrative Support	0.50				0.50
2.1 Program Management	2.1.1 Administration	**US Total**				**3.02**	**0.60**	**2.07**		**5.68**
2.1 Program Management	2.1.1 Administration	ALBERTA	KE	GRANT, DARREN	Pubcom adjoint member				0.10	0.10
2.1 Program Management	2.1.1 Administration	DESY	KE	SPIERING, CHRISTIAN	ExecCom member				0.10	0.10
2.1 Program Management	2.1.1 Administration	DESY	KE	ACKERMANN, MARKUS	Analysis Coordinator				0.35	0.35
2.1 Program Management	2.1.1 Administration	HUMBOLDT	KE	KAPPES, ALEXANDER	Pubcom member				0.10	0.10
2.1 Program Management	2.1.1 Administration	RWTH	KE	WIEBUSCH, CHRISTOPHER	Coordinate BMBF Funding				0.10	0.10
2.1 Program Management	2.1.1 Administration	SU	KE	HULTH, PER OLOF	ExecCom member				0.20	0.20
2.1 Program Management	2.1.1 Administration	SU	KE	HULTH, PER OLOF	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 SU	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	ULB	KE	HANSON, KAEL ULB	ExecCom member				0.20	0.20
2.1 Program Management	2.1.1 Administration	UU	KE	BOTNER, OLGA	Outreach				0.05	0.05
2.1 Program Management	2.1.1 Administration	UU	KE	BOTNER, OLGA	Pubcom Chair				0.40	0.40
2.1 Program Management	2.1.1 Administration	UU	KE	HALLGREN, ALLAN	Outreach				0.05	0.05
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	ExecCom member				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	MAINZ	KE	KOPKE, LUTZ	Supernova group Co-Chair				0.25	0.25
2.1 Program Management	2.1.1 Administration	BOCHUM	KE	BECKER, JULIA	Pubcom member				0.10	0.10
2.1 Program Management	2.1.1 Administration	**Non-US Total**							**2.90**	**2.90**
2.1 Program Management	**2.1.1 Administration**					**3.02**	**0.60**	**2.07**	**2.90**	**8.58**
2.1 Program Management	2.1.2 Engineering And R&D	KU	KE	BESSON, DAVE	EMI - Radio R&D			0.10		0.10
2.1 Program Management	2.1.2 Engineering And R&D	UMD	KE	HOFFMAN, KARA	Detector R&D			0.20		0.20
2.1 Program Management	2.1.2 Engineering And R&D	UW	SC	DUVERNOIS, MICHAEL	Science Support	0.25				0.25
2.1 Program Management	2.1.2 Engineering And R&D	UW	SC	DUVERNOIS, MICHAEL	EMI, Instrumentation, I/F	0.15				0.15
2.1 Program Management	2.1.2 Engineering And R&D	UW	SE	LAUNDRIE, ANDREW	EMI, Instrumentation, I/F	0.10				0.10
2.1 Program Management	2.1.2 Engineering And R&D	UW	SE	LAUNDRIE, ANDREW	Engineering Support	0.65				0.65
2.1 Program Management	2.1.2 Engineering And R&D	UW	SE	SANDSTROM, PERRY	EMI, Instrumentation, I/F	0.25				0.25
2.1 Program Management	2.1.2 Engineering And R&D	UW	SE	SANDSTROM, PERRY	Engineering Support	0.25				0.25
2.1 Program Management	2.1.2 Engineering And R&D	UW	MA	HAUGEN, JAMES	Engineering Support	0.10				0.10
2.1 Program Management	2.1.2 Engineering And R&D	UW	SC	DUVERNOIS, MICHAEL	EMI, Instrumentation, I/F	0.25				0.25
2.1 Program Management	2.1.2 Engineering And R&D	**US Total**				**2.00**	**0.00**	**0.30**		**2.30**
2.1 Program Management	2.1.2 Engineering And R&D	DESY	KE	NAHNHAUER, ROLF	Acoustic R&D Support				0.10	0.10
2.1 Program Management	2.1.2 Engineering And R&D	EPFL	KE	RIBORDY, MATHIEU	Acoustic R&D Support				0.02	0.02
2.1 Program Management	2.1.2 Engineering And R&D	RWTH	PO	LAIHEM, KARIM	Acoustic R&D Support				0.10	0.10
2.1 Program Management	2.1.2 Engineering And R&D	RWTH	PO	LAIHEM, KARIM	Acoustic WG Lead				0.10	0.10
2.1 Program Management	2.1.2 Engineering And R&D	RWTH	PO	PAUL, LARRISA	RASTA Antenna Construction				0.10	0.10
2.1 Program Management	2.1.2 Engineering And R&D	RWTH	GR	HEINEN, DIRK	Acoustic R&D Support				0.10	0.10
2.1 Program Management	2.1.2 Engineering And R&D	ULB	KE	HANSON, KAEL ULB	EMI/R&D				0.10	0.10
2.1 Program Management	2.1.2 Engineering And R&D	UU	KE	HALLGREN, ALLAN	Acoustic R&D Support				0.05	0.05
2.1 Program Management	2.1.2 Engineering And R&D	WUPPERTAL	KE	HELBING, KLAUS	R&D Lead				0.10	0.10
2.1 Program Management	2.1.2 Engineering And R&D	WUPPERTAL	KE	WUPPERTAL KE	RFI				0.10	0.10
2.1 Program Management	2.1.2 Engineering And R&D	WUPPERTAL	PO	KARG, TIMO	Acoustic				0.10	0.10
2.1 Program Management	2.1.2 Engineering And R&D	GENT	SC	UGENT SC	Acoustic R&D Support				0.05	0.05
2.1 Program Management	2.1.2 Engineering And R&D	GENT	GR	UGENT GR	Acoustic R&D Support				0.05	0.05
2.1 Program Management	2.1.2 Engineering And R&D	**Non-US Total**							**1.07**	**1.07**
2.1 Program Management	**2.1.2 Engineering And R&D Support**					**2.00**	**0.00**	**0.30**	**1.07**	**3.37**

WBS L2		WBS L3		Institution		Labor Cat.		Names	Tasks	NSF M&O Core	NSF Base Grants	U.S. IN-KIND	Non U.S. In-Kind	Grand Total
Cat.	**Description**	**Cat.**	**Description**	**Cat.**	**Description**	**Cat.**	**Description**							
AD	Administration	GR	Graduate Student	PO	Postdoctoral Scientist	TE	Technician							
CS	Computer Science Eng.	KE	Key Personnel/Faculty	SC	Scientist	WO	Winterover							
EN	Engineer	MA	Management	SE	Senior Engineer									
2.1 Program Management		2.1.3 Usap Support		UW		MA		HAUGEN, JAMES	USAP Support	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		OSU		PO		OSU PO	Outreach			0.05		0.05
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		PSU		KE		DEYOUNG, TYCE	Education & Outreach			0.05		0.05
2.1 Program Management		2.1.4 Education & Outreach		UMD		KE		UMD KE	E&O			0.10		0.10
2.1 Program Management		2.1.4 Education & Outreach		UW		AD		Gianopoulos, Andrea	Education & Outreach Coordination	0.75				0.75
2.1 Program Management		2.1.4 Education & Outreach		UWRF		KE		MADSEN, JIM	Teachers' program & UWRF Upward Bound	0.10				0.10
2.1 Program Management		2.1.4 Education & Outreach		UWRF		TE		UWRF TE	Teachers Program	0.10				0.10
2.1 Program Management		2.1.4 Education & Outreach		**US Total**						0.95	0.00	0.25		1.20
2.1 Program Management		**2.1.4 Education & Outreach**								**0.95**	**0.00**	**0.25**		**1.20**
2.1 Program Management		**WBS L2 Total**								**6.22**	**0.60**	**2.62**	**3.97**	**13.40**
2.2 Detector Operations & Main		2.2 Detector Operations & Maintenance		LBNL		KE		NYGREN, DAVID R	Track Engine Trigger			0.10		0.10
2.2 Detector Operations & Main		2.2 Detector Operations & Maintenance		UW		MA		LAITSCH, DENISE	Detector Operations Manager	1.00				1.00
2.2 Detector Operations & Main		2.2 Detector Operations & Maintenance		**US Total**						1.00	0.00	0.10		1.10
2.2 Detector Operations & Main		2.2 Detector Operations & Maintenance		UMH		GR		KOHNEN, GEORGE	Database Coordinator				0.10	0.10
2.2 Detector Operations & Main				**Non-US Total**									0.10	0.10
2.2 Detector Operations & Main		**2.2 Detector Operations & Maintenance**								**1.00**	**0.00**	**0.10**	**0.10**	**1.20**
2.2 Detector Operations & Main		2.2.1 Run Coordination		UW		SC		KRASBERG, MARK	Winter Overs coordinator	0.25				0.25
2.2 Detector Operations & Main		2.2.1 Run Coordination		UW		TE		UW Winter Overs	Operate Detector (Winter-Overs)	3.00				3.00
2.2 Detector Operations & Main		2.2.1 Run Coordination		**US Total**						3.25	0.00	0.00		3.25
2.2 Detector Operations & Main		2.2.1 Run Coordination		UC		GR		UC GR	Flasher Runs				0.10	0.10
2.2 Detector Operations & Main		2.2.1 Run Coordination		BONN		PO		BOSSER, SEBASTIAN	Run Coordinator				0.50	0.50
2.2 Detector Operations & Main		2.2.1 Run Coordination		**Non-US Total**									0.60	0.60
2.2 Detector Operations & Main		**2.2.1 Run Coordination**								**3.25**	**0.00**	**0.00**	**0.60**	**3.85**
2.2 Detector Operations & Main		2.2.2 Data Acquisition		LBNL		EN		STEZELBERGER,THORSTE	Maintain DAQ Hardware (Hubs, DOR, Clocks, GPS,...)	0.15				0.15
2.2 Detector Operations & Main		2.2.2 Data Acquisition		UD		KE		SECKEL, DAVID	DAQ Monitoring		0.05			0.05
2.2 Detector Operations & Main		2.2.2 Data Acquisition		UW		SC		KRASBERG, MARK	DOM Cal Maintenance, DOM Monitoring snd Troubleshooting	0.35				0.35
2.2 Detector Operations & Main		2.2.2 Data Acquisition		UW		SC		KRASBERG, MARK	Provide Real-time System Monitoring and Paging	0.20				0.20
2.2 Detector Operations & Main		2.2.2 Data Acquisition		UW		SC		WENDT, CHRISTOPHER	DOM CAL Maintenance	0.25				0.25
2.2 Detector Operations & Main		2.2.2 Data Acquisition		UW		CS		Frere, Michael	Maintain DAQ Software Systems (incl. triggers, DOM SW, etc. up to Event Builder)	1.00				1.00
2.2 Detector Operations & Main		2.2.2 Data Acquisition		UW		CS		GLOWACKI, DAVID	Maintain DAQ Software Systems (incl. triggers, DOM SW, etc. up to Event Builder)	1.00				1.00
2.2 Detector Operations & Main		2.2.2 Data Acquisition		UW		CS		Newcomb, Matthew	Maintain DAQ Software Systems (incl. triggers, DOM SW, etc. up to Event Builder)	0.75				0.75
2.2 Detector Operations & Main		2.2.2 Data Acquisition		UW		TE		BELLINGER, JIM	Maintain South Pole Test System Hardware and Operating Systems	0.25				0.25
2.2 Detector Operations & Main		2.2.2 Data Acquisition		UW		SE		SANDSTROM, PERRY	Maintain DAQ Hardware (Hubs, DOR, Clocks, GPS,...)	0.25				0.25
2.2 Detector Operations & Main		2.2.2 Data Acquisition		UW		CS		JACOBSEN, JOHN (NPX)	Maintain DAQ Hardware (Hubs, DOR, Clocks, GPS,...)	0.15				0.15
2.2 Detector Operations & Main		2.2.2 Data Acquisition		UW		GR		WEAVER, CHRISTOPHER	DOM CAL Maintenance		0.15			0.15
2.2 Detector Operations & Main		2.2.2 Data Acquisition		**US Total**						4.35	0.15	0.05		4.55
2.2 Detector Operations & Main		2.2.2 Data Acquisition		ULB		KE		HANSON, KAEL ULB	Data Acquisition				0.20	0.20
2.2 Detector Operations & Main		2.2.2 Data Acquisition		**Non-US Tota**									0.20	0.20
2.2 Detector Operations & Main		**2.2.2 Data Acquisition**								**4.35**	**0.15**	**0.05**	**0.20**	**4.75**
2.2 Detector Operations & Main		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 & Main		2.2.3 Online Filter (Pnf)		UMD		GR		REDL, PETER	Online Filter Testing		0.25			0.25
2.2 Detector Operations & Main		2.2.3 Online Filter (Pnf)		**US Total**						0.20	0.25	0.00		0.45
2.2 Detector Operations & Main		**2.2.3 Online Filter (Pnf)**								**0.20**	**0.25**	**0.00**		**0.45**
2.2 Detector Operations & Main		2.2.4 Sps Operations		UW		SE		SANDSTROM, PERRY	Maintain South Pole Computing H/W Infrastructure and operating systems	0.25				0.25
2.2 Detector Operations & Main		2.2.4 Sps Operations		UW		TE		UW Technician	Maintain South Pole Computing H/W Infrastructure and operating systems	0.75				0.75
2.2 Detector Operations & Main		2.2.4 Sps Operations		UW		TE		WISNIEWSKI, PAUL	Networking and Security Maintenance	0.25				0.25
2.2 Detector Operations & Main		2.2.4 Sps Operations		**US Total**						1.25	0.00	0.00		1.25
2.2 Detector Operations & Main		**2.2.4 Sps Operations**								**1.25**	**0.00**	**0.00**		**1.25**
2.2 Detector Operations & Main		2.2.5 Spts Operations		UW		SE		LAUNDRIE, ANDREW	Maintain South Pole Test System Hardware and Operating Systems	0.10				0.10
2.2 Detector Operations & Main		2.2.5 Spts Operations		UW		TE		UW Technician	Maintain South Pole Test System Hardware and Operating Systems	0.25				0.25
2.2 Detector Operations & Main		2.2.5 Spts Operations		**US Total**						0.35	0.00	0.00		0.35
2.2 Detector Operations & Main		**2.2.5 Spts Operations**								**0.35**	**0.00**	**0.00**		**0.35**

IceCube M&O Staffing Matrix sort by WBS v12.0 2012.0315

WBS L2	WBS L3	Institution	Labor Cat.	Names	Tasks	NSF M&O Core	NSF Base Grants	U.S. IN-KIND	Non U.S. In-Kind	Grand Total

Cat. Descriptions:

Cat.	Description	Cat.	Description	Cat.	Description	Cat.	Description
AD	Administration	GR	Graduate Student	PO	Postdoctoral Scientist	TE	Technician
CS	Computer Science Eng.	KE	Key Personnel/Faculty	SC	Scientist	WO	Winterover
EN	Engineer	MA	Management	SE	Senior Engineer		

WBS L2	WBS L3	Institution	Labor Cat.	Names	Tasks	NSF M&O Core	NSF Base Grants	U.S. IN-KIND	Non U.S. In-Kind	Grand Total
2.2 Detector Operations & Main	2.2.6 Experiment Control	UW	CS	JACOBSEN, JOHN (NPX)	IceCube Live Maintenance and Upgrades	0.65				0.65
2.2 Detector Operations & Main	2.2.6 Experiment Control	US Total				0.65	0.00	0.00		0.65
2.2 Detector Operations & Main	**2.2.6 Experiment Control**					**0.65**	**0.00**	**0.00**		**0.65**
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	CAU	KE	JAPARIDZE, GEORGE	Monitoring shifts			0.02		0.02
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	GTECH	GR	GTECH GR	Monitoring shifts		0.03			0.03
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	KU	KE	BESSON, DAVE	Monitoring shifts			0.02		0.02
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	StonyBrook	KE	KIRYLUK, JOANNA	BadDomList			0.10		0.10
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	LBNL	PO	CHANG, HYON HA	Monitoring shifts		0.09			0.09
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	OSU	PO	OSU PO	Monitoring shifts			0.02		0.02
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	OSU	PO	ROTT, CARSTEN	Maintain good run list			0.20		0.20
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	PSU	PO	CLARK, KEN	Monitoring shifts		0.03			0.03
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	PSU	GR	BELL, MICHAEL	Monitoring shifts		0.03			0.03
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	SUBR	SC	TER-ANTONYAN, SAMVEL	Detector Monitoring			0.02		0.02
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	UA	PO	ZARZHITZKY, PAVEL	Monitoring shifts		0.03			0.03
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	UA	GR	XU, DONGLIAN	Monitoring shifts		0.03			0.03
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	UA	GR	PEPPER, JAMES	Monitoring shifts		0.03			0.03
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	UA	GR	LARSON, MICHAEL	Monitoring shifts		0.03			0.03
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	UAA	KE	RAWLINS, KATHERINE	Monitoring shifts			0.02		0.02
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	UCB	SC	FILIMONOV, KIRILL	Coordinate Monitoring		0.10			0.10
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	UCB	SC	FILIMONOV, KIRILL	Coordinate Monitoring	0.25				0.25
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	UCB	SC	UCB SC	Monitoring shifts		0.10			0.10
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	UCB	GR	UCB GR	Monitoring shifts		0.10			0.10
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	UCI	PO	SILVERSTRI, ANDREA	Monitoring shifts			0.01		0.01
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	UCI	GR	HANSON, JORDAN	Monitoring shifts			0.01		0.01
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	UD	PO	KUWABARA, TAKAO	Temp. & Pressure atmospheric monitoring		0.40			0.40
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	UMD	PO	UMD PO	Monitoring shifts		0.03			0.03
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	UMD	GR	UMD GR	Monitoring shifts		0.06			0.06
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	UW	PO	UW PO	Monitoring shifts		0.12			0.12
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	UW	GR	UW GR	Monitoring shifts		0.12			0.12
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	US Total				0.25	1.33	0.41		1.99
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	CHIBA	GR	CHIBA GR	Detector Monitoring				0.03	0.03
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	DESY	SC	DESY SC	Detector Monitoring				0.06	0.06
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	DESY	SC	BENABDERRAHMANE, LOF	Deputy Monitoring Coordinator				0.10	0.10
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	DESY	GR	DESY GR	Detector Monitoring				0.12	0.12
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	DTMND	GR	DTMD GR	Detector Monitoring				0.03	0.03
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	EPFL	PO	BRUIJN, RONALD	Detector Monitoring				0.03	0.03
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	Munchen	GR	MPI GR	Detector Monitoring				0.05	0.05
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	RWTH	GR	PAUL, LARRISA	RASTA & SPATS monitoring				0.10	0.10
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	RWTH	GR	HEINEN, DIRK	SPATS monitoring				0.10	0.10
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	RWTH	GR	RWTH GR	Monitoring (3 weeks)				0.09	0.09
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	SU	GR	SU GR	Detector Monitoring				0.06	0.06
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	UC	GR	UC GR	Detector Monitoring				0.02	0.02
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	ULB	GR	ULB GR	Detector Monitoring				0.03	0.03
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	UOX	KE	SARKAR, SUBIR	Detector Monitoring				0.02	0.02
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	UU	GR	UU GR	Detector Monitoring				0.03	0.03
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	VUB	PO	VUB PO	Monitoring shifts				0.06	0.06
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	VUB	GR	VUB GR	Monitoring shifts				0.06	0.06
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	WUPPERTAL	GR	WUPPERTAL GR	South Pole EMI Monitoring				0.15	0.15
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	WUPPERTAL	GR	WUPPERTAL GR	AURA, SPATS, surface antenna operations (RASTA)				0.45	0.45
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	MAINZ	GR	UM GR	Detector Monitoring				0.05	0.05
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	GENT	GR	UGENT GR	Detector Monitoring				0.03	0.03
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	DPNC Genev	PO	AGUILAR SANCHEZ JUAN A	Detector Monitoring				0.20	0.20
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	BONN	GR	UBONN GR	Detector Monitoring				0.03	0.03
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	BOCHUM	GR	UBOCHUM GR	Detector Monitoring				0.03	0.03
2.2 Detector Operations & Main	2.2.7 Detector Monitoring	Non-US Total							1.93	1.93
2.2 Detector Operations & Main	**2.2.7 Detector Monitoring**					**0.25**	**1.33**	**0.41**	**1.93**	**3.92**
2.2 Detector Operations & Main	2.2.8 Detector Calibration	GTECH	GR	DAUGHHETEE, JACOB	Standard Candle Vertex and Energy Calibration		0.20			0.20
2.2 Detector Operations & Main	2.2.8 Detector Calibration	UA	KE	WILLIAMS, DAWN	managing flasher runs and other calibrations (stage 2 geometry)			0.15		0.15
2.2 Detector Operations & Main	2.2.8 Detector Calibration	UA	GR	XU, DONGLIAN	Low-energy cascade calibration with flashers		0.10			0.10
2.2 Detector Operations & Main	2.2.8 Detector Calibration	UA	GR	PEPPER, JAMES	Verification monitoring integration into IceCube Live		0.30			0.30
2.2 Detector Operations & Main	2.2.8 Detector Calibration	UCB	SC	WOSCHNAGG, KURT	Calibration Lead		0.10			0.10
2.2 Detector Operations & Main	2.2.8 Detector Calibration	UCB	GR	UCB GR	Calibration		0.10			0.10
2.2 Detector Operations & Main	2.2.8 Detector Calibration	UW	SC	WENDT, CHRISTOPHER	Prepare and Evaluate Flasher Calibrations Evaluate (DomCal) Calibration Runs and update Calibration constants, absolute DOM sensitivity	0.35				0.35
2.2 Detector Operations & Main	2.2.8 Detector Calibration	UW	GR	FEINTZIG, JACOB	Ice Properties		0.15			0.15
2.2 Detector Operations & Main	2.2.8 Detector Calibration	UW	GR	VAN SANTEN, JACOB	Calibration of DOM waveforms		0.15			0.15
2.2 Detector Operations & Main	2.2.8 Detector Calibration	US Total				0.35	1.10	0.15		1.60
2.2 Detector Operations & Main	2.2.8 Detector Calibration	DESY	GR	ACHIM STOESSL	Flasher Analysis				0.20	0.20
2.2 Detector Operations & Main	2.2.8 Detector Calibration	Non-US Total							0.20	0.20
2.2 Detector Operations & Main	**2.2.8 Detector Calibration**					**0.35**	**1.10**	**0.15**	**0.20**	**1.80**

WBS L2		WBS L3		Institution		Labor Cat.		Names	Tasks	NSF M&O Core	NSF Base Grants	U.S. IN-KIND	Non U.S. In-Kind	Grand Total
Cat.	Description	Cat.	Description	Cat.	Description	Cat.	Description							
AD	Administration	GR	Graduate Student	PO	Postdoctoral Scientist	TE	Technician							
CS	Computer Science Eng.	KE	Key Personnel/Faculty	SC	Scientist	WO	Winterover							
EN	Engineer	MA	Management	SE	Senior Engineer									
2.2 Detector Operations & Main	2.2.9 Icetop Operations	UD		SC				TILAV, SERAP	Coordinate IceTop Operations	1.00				1.00
2.2 Detector Operations & Main	2.2.9 Icetop Operations	UWRF		KE				SPICZAK, GLENN	IceTop tank Monitoring			0.03		0.03
2.2 Detector Operations & Main	2.2.9 Icetop Operations	US Total								1.00	0.00	0.03		1.03
2.2 Detector Operations & Main	**2.2.9 Icetop Operations**									1.00	0.00	0.03	0.00	1.03
2.2 Detector Operations & Main	2.2.10 Supernova Operations	MAINZ		GR				KROLL, GÖSTA	SuperNova Operations				0.20	0.20
2.2 Detector Operations & Main	2.2.10 Supernova Operations	MAINZ		GR				EBERHARD, BENJAMIN	SuperNova Operations				0.50	0.50
2.2 Detector Operations & Main	2.2.10 Supernova Operations	MAINZ		GR				BAUM, VOLKER	SuperNova Operations				0.50	0.50
2.2 Detector Operations & Main	2.2.10 Supernova Operations	EPFL		KE				RIBORDY, MATHIEU	Development of the multi-hit detection technique				0.20	0.20
2.2 Detector Operations & Main	2.2.10 Supernova Operations	EPFL		PO				BRUIJN, RONALD	Development of the multi-hit detection technique				0.25	0.25
2.2 Detector Operations & Main	2.2.10 Supernova Operations	Non-US Tota											1.65	1.65
2.2 Detector Operations & Main	**2.2.10 Supernova Operations**												1.65	1.65
2.2 Detector Operations & Ma	**WBS L2 Total**									12.65	2.83	0.74	4.68	20.89
2.3 Computing And Data Mana	2.3.1 Core Software	UMD		GR				HELLAUER, ROBERT	Core Software		0.25			0.25
2.3 Computing And Data Mana	2.3.1 Core Software	UMD		GR				MEAGHER, KEVIN	Core Software		0.50			0.50
2.3 Computing And Data Mana	2.3.1 Core Software	UW		TE				DIAZ-VELEZ, JUAN CARLOS	Simulation Programs: diplopia	0.80				0.80
2.3 Computing And Data Mana	2.3.1 Core Software	UW		TE				FADIRAN, OLADIPO	Maintain Data Processing Software	0.20				0.20
2.3 Computing And Data Mana	2.3.1 Core Software	UW		PO				KURAHASHI, NAOKO	IceTray Support (Q frame)		0.15			0.15
2.3 Computing And Data Mana	2.3.1 Core Software	US Total								1.00	0.90	0.00		1.90
2.3 Computing And Data Mana	2.3.1 Core Software	RWTH		PO				BOERSMA, DAVID RWTH	Maintain Reconstruction Framework				0.10	0.10
2.3 Computing And Data Mana	2.3.1 Core Software	ULB		PO				MAROTTA, ALBERTO	Maintain and Operate Database Systems (I3OmDb)				0.20	0.20
2.3 Computing And Data Mana	2.3.1 Core Software	Non-US Tota											0.30	0.30
2.3 Computing And Data Mana	**2.3.1 Core Software**									1.00	0.90	0.00	0.30	2.20
2.3 Computing And Data Mana	2.3.2 Data Storage & Transfer	UW		TE				FADIRAN, OLADIPO	Transformation of Data for Long-Term Persistence and Archival. Maintain Data Warehouse Standards, Software (Ingest), Data Access (FTP), and Web Interface	0.20				0.20
2.3 Computing And Data Mana	2.3.2 Data Storage & Transfer	UW		TE				RICHARDS, JOHN	Maintain and Operate Data Storage Infrastructure	1.00				1.00
2.3 Computing And Data Mana	2.3.2 Data Storage & Transfer	UW		TE				Auer, Ralf	Maintain and Operate Data Storage Infrastructure	0.50				0.50
2.3 Computing And Data Mana	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 Mana	2.3.2 Data Storage & Transfer	US Total								2.20	0.00	0.00		2.20
2.3 Computing And Data Mana	2.3.2 Data Storage & Transfer	DESY		GR				SCHöNWALD, ARNE	Data transfer UW-DESY				0.10	0.10
2.3 Computing And Data Mana	2.3.2 Data Storage & Transfer	Non-US Tota											0.10	0.10
2.3 Computing And Data Mana	**2.3.2 Data Storage & Transfer**									2.20	0.00	0.00	0.10	2.30
2.3 Computing And Data Mana	2.3.3 Computing Resources	PSU		PO				KOSKINEN, JASON	Coordination and Support for Grid and distributed computing	0.13				0.13
2.3 Computing And Data Mana	2.3.3 Computing Resources	PSU		PO				CLARK, KEN	Coordination and Support for Grid and distributed computing	0.13				0.13
2.3 Computing And Data Mana	2.3.3 Computing Resources	SUBR		SC				TER-ANTONYAN, SAMVEL	LONI Grid computing			0.30		0.30
2.3 Computing And Data Mana	2.3.3 Computing Resources	UW		TE				SKARLUPKA, HEATH	Maintain Core High Performance Computing Systems Coordination and Support for Grid and distributed computing	1.00				1.00
2.3 Computing And Data Mana	2.3.3 Computing Resources	UW		TE				Barnet, Steve	Maintain Core Computing Systems, Coordination Grid & distributed computing	1.00				1.00
2.3 Computing And Data Mana	2.3.3 Computing Resources	UW		TE				BELLINGER, JIM	Maintain Core High Performance Computing Systems	0.50				0.50
2.3 Computing And Data Mana	2.3.3 Computing Resources	UW		TE				WISNIEWSKI, PAUL	Maintain Data Center Networking and Security	0.75				0.75
2.3 Computing And Data Mana	2.3.3 Computing Resources	UW		TE				Auer, Ralf	Maintain Data Center Infrastructure	0.50				0.50
2.3 Computing And Data Mana	2.3.3 Computing Resources	US Total								4.00	0.00	0.30		4.30
2.3 Computing And Data Mana	2.3.3 Computing Resources	DESY		TE				DESY TE	European Data Center -Distributed Computing and Labor				2.00	2.00
2.3 Computing And Data Mana	2.3.3 Computing Resources	DESY		GR				JACOBI, EMANUEL	Reconstruction Release Manager , Maintain Reconstruction Framework				0.20	0.20
2.3 Computing And Data Mana	2.3.3 Computing Resources	DTMND		SC				PIELOTH, DAMIAN	Coordinate GRID computing in Germany				0.25	0.25
2.3 Computing And Data Mana	2.3.3 Computing Resources	SU		SC				SU SC	Computing Resources				0.40	0.40
2.3 Computing And Data Mana	2.3.3 Computing Resources	UMH		GR				KOHNEN, GEORGE	IC database management				0.30	0.30
2.3 Computing And Data Mana	2.3.3 Computing Resources	Non-US Tota											3.15	3.15
2.3 Computing And Data Mana	**2.3.3 Computing Resources**									4.00	0.00	0.30	3.15	7.45

WBS L2	WBS L3	Institution	Labor Cat.	Names		Tasks	NSF M&O Core	NSF Base Grants	U.S. IN-KIND	Non U.S. In-Kind	Grand Total

Legend (Cat. Description):

Cat.	Description	Cat.	Description	Cat.	Description	Cat.	Description
AD	Administration	GR	Graduate Student	PO	Postdoctoral Scientist	TE	Technician
CS	Computer Science Eng.	KE	Key Personnel/Faculty	SC	Scientist	WO	Winterover
EN	Engineer	MA	Management	SE	Senior Engineer		

WBS L2	WBS L3	Institution	Labor Cat.	Name Cat.	Names	Tasks	NSF M&O Core	NSF Base Grants	U.S. IN-KIND	Non U.S. In-Kind	Grand Total
2.3 Computing And Data Mana	2.3.4 Data Production Processing	UW	PO		KURAHASHI, NAOKO	Muon channel		0.20			0.20
2.3 Computing And Data Mana	2.3.4 Data Production Processing	UW	GR		SANTANDER, MARCOS	Moon Shadow online		0.15			0.15
2.3 Computing And Data Mana	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 Mana	2.3.4 Data Production Processing				US Total		0.50	0.35	0.00		0.85
2.3 Computing And Data Mana	2.3.4 Data Production Processing	RWTH	GR		SCHUKRAFT, ANNE	Photonics Production				0.10	0.10
2.3 Computing And Data Mana	2.3.4 Data Production Processing				Non-US Total					0.10	0.10
2.3 Computing And Data Mana	**2.3.4 Data Production Processing**						0.50	0.35	0.00	0.10	0.95
2.3 Computing And Data Mana	2.3.5 Simulation Production	LBNL	PO		GERHARDT, LISA	Simulation Production on PDSF		0.20			0.20
2.3 Computing And Data Mana	2.3.5 Simulation Production	PSU	PO		KOSKINEN, JASON	Simulation Production		0.08			0.08
2.3 Computing And Data Mana	2.3.5 Simulation Production	PSU	PO		CLARK, KEN	Simulation Production		0.08			0.08
2.3 Computing And Data Mana	2.3.5 Simulation Production	UD	PO		TAMBURRO, ALESSIO	IceTop Simulation Production		0.35			0.35
2.3 Computing And Data Mana	2.3.5 Simulation Production	UD	PO		HUSSAIN, SHAHID	IceTop Simulation Production		0.15			0.15
2.3 Computing And Data Mana	2.3.5 Simulation Production	UMD	GR		CHRISTY, BRIAN	Simulation Production coordination		0.25			0.25
2.3 Computing And Data Mana	2.3.5 Simulation Production	UW	SC		DESIATI, PAOLO	Coordination of Simulation Production	0.70				0.70
2.3 Computing And Data Mana	2.3.5 Simulation Production	UW	GR		MCNALLY, FRANK	IceTop Simulation ProductionProduction / Data Processing		0.30			0.30
2.3 Computing And Data Mana	2.3.5 Simulation Production	UW	TE		FADIRAN, OLADIPO	Simulation Production Coordination; production configurations, test production and web portal.	0.60				0.60
2.3 Computing And Data Mana	2.3.5 Simulation Production				US Total		1.30	1.41	0.00		2.71
2.3 Computing And Data Mana	2.3.5 Simulation Production	DESY	SC		GORA, DARIUSZ	Simulation Production Cluster				0.20	0.20
2.3 Computing And Data Mana	2.3.5 Simulation Production	DESY	GR		DESY GR	Simulation Production Cluster				0.15	0.15
2.3 Computing And Data Mana	2.3.5 Simulation Production	DTMND	GR		DTMD GR	Simulation Production				0.40	0.40
2.3 Computing And Data Mana	2.3.5 Simulation Production	RWTH	PO		LAIHEM, KARIM	MonteCarlo simulations of Cherenkov light yield				0.10	0.10
2.3 Computing And Data Mana	2.3.5 Simulation Production	RWTH	GR		PAUL, LARRISA	Simulation Production on cluster/GRID				0.30	0.30
2.3 Computing And Data Mana	2.3.5 Simulation Production	RWTH	GR		WALLRAFF, MARIUS	Simulation Production on GPU				0.20	0.20
2.3 Computing And Data Mana	2.3.5 Simulation Production	ULB	PO		MAROTTA, ALBERTO	Computer Cluster - simulation				0.30	0.30
2.3 Computing And Data Mana	2.3.5 Simulation Production	VUB	PO		STRAHLER, ERIK	simulation of ice properties and DOM sensitivities				0.25	0.25
2.3 Computing And Data Mana	2.3.5 Simulation Production	VUB	PO		MILLER, JONATHAN	Ice properties and flasher runs				0.13	0.13
2.3 Computing And Data Mana	2.3.5 Simulation Production	ALBERTA	KE		GRANT, DARREN	WestGrid computing				0.10	0.10
2.3 Computing And Data Mana	2.3.5 Simulation Production	ALBERTA	GR		WOOD, TANIA	WestGrid computing				0.20	0.20
2.3 Computing And Data Mana	2.3.5 Simulation Production	WUPPERTAL	PO		KARG, TIMO	Simulation Production				0.20	0.20
2.3 Computing And Data Mana	2.3.5 Simulation Production	WUPPERTAL	GR		WUPPERTAL GR	Simulation Production				0.20	0.20
2.3 Computing And Data Mana	2.3.5 Simulation Production	MAINZ	GR		WIEBE, KLAUS	Simulation Production				0.10	0.10
2.3 Computing And Data Mana	2.3.5 Simulation Production	UMH	GR		KOHNEN, GEORGE	Simulation Production				0.25	0.25
2.3 Computing And Data Mana	2.3.5 Simulation Production	EPFL	PO		BRUIJN, RONALD	Run cluster EPFL				0.10	0.10
2.3 Computing And Data Mana	2.3.5 Simulation Production				Non-US Total					3.18	3.18
2.3 Computing And Data Mana	**2.3.5 Simulation Production**						1.30	1.41	0.00	3.18	5.89
2.3 Computing And Data Man WBS L2 Total							9.00	2.66	0.30	6.83	18.79
2.4 Triggering And Filtering	2.4.1 TFT Coordination	GTECH	KE		TABOADA, IGNACIO	TFT Board Chair		0.25			0.25
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	PO		BERGHAUS, PATRICK	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	UMD	SC		BLAUFUSS, ERIK	Filter requests, bandwidth, TFT Board Member	0.30				0.30
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		0.20			0.20
2.4 Triggering And Filtering	2.4.1 TFT Coordination				US Total		0.30	0.55	0.20		1.05
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	BONN	PO		BOSSER, SEBASTIAN	TFT Board member				0.10	0.10
2.4 Triggering And Filtering	2.4.1 TFT Coordination	WUPPERTAL	PO		KARG, TIMO	TFT Board member				0.10	0.10
2.4 Triggering And Filtering	2.4.1 TFT Coordination	DPNC Geneva	KE		MONTARULI, TERESA	TFT Board member				0.10	0.10
2.4 Triggering And Filtering	2.4.1 TFT Coordination	UU	KE		HALLGREN, ALLAN	TFT Board member				0.10	0.10
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					0.60	0.60
2.4 Triggering And Filtering	**2.4.1 TFT Coordination**						0.30	0.55	0.20	0.60	1.65
2.4 Triggering And Filtering	2.4 Triggering And Filtering	UA	GR		LARSON, MICHAEL	Track engine		0.15			0.15
2.4 Triggering And Filtering	2.4.2 Physics Filters	StonyBrook	KE		KIRYLUK, JOANNA	Cascade WG Co-Chair		0.25			0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	LBNL	KE		KLEIN, SPENCER	Diffuse 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		0.30			0.30
2.4 Triggering And Filtering	2.4.2 Physics Filters	PSU	KE		COWEN, DOUG	Hybrid/Tau WG Chair		0.25			0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	PSU	KE		DEYOUNG, TYCE	Deep Core WG - Co Chair		0.25			0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	UCB	SC		WOSCHNAGG, KURT	Diffuse / atmosnu WG Co-chair		0.10			0.10
2.4 Triggering And Filtering	2.4.2 Physics Filters	UD	PO		BERGHAUS, PATRICK	moun channel WG Co. Chair		0.25			0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	UD	PO		TAMBURRO, ALESSIO	CR-WG Co Chair		0.25			0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	UMD	SC		BLAUFUSS, ERIK	GRB WG Chair		0.25			0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	UMD	PO		WISSING, HENRIKE	EHE and Brights WG co-chair		0.25			0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	StonyBrook	PO		LESIAK-BZDAK, MARIOLA	Cascade filters			0.20		0.20

WBS L2	WBS L3	Institution	Labor Cat.	Names	Tasks	NSF M&O Core	NSF Base Grants	U.S. IN-KIND	Non U.S. In-Kind	Grand Total

Legend:

Cat.	Description	Cat.	Description	Cat.	Description	Cat.	Description
AD	Administration	GR	Graduate Student	PO	Postdoctoral Scientist	TE	Technician
CS	Computer Science Eng.	KE	Key Personnel/Faculty	SC	Scientist	WO	Winterover
EN	Engineer	MA	Management	SE	Senior Engineer		

WBS L2	WBS L3	Institution	Labor Cat.	Names	Tasks	NSF M&O Core	NSF Base Grants	U.S. IN-KIND	Non U.S. In-Kind	Grand Total
2.4 Triggering And Filtering	2.4.2 Physics Filters	UW	KE	MARUYAMA, REINA	Supernova WG Co-Chair			0.15		0.15
2.4 Triggering And Filtering	2.4.2 Physics Filters	UW	KE	WESTERHOFF, STEFAN	CR-WG Co Chair			0.25		0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	UW	PO	AUFFENBERG, JAN	Online filters (EHE)		0.15			0.15
2.4 Triggering And Filtering	2.4.2 Physics Filters	UW	PO	KOPPER, CLAUDIO	Cascade filter			0.15		0.15
2.4 Triggering And Filtering	2.4.2 Physics Filters	UW	GR	WEAVER, CHRISTOPHER	Online filters		0.15			0.15
2.4 Triggering And Filtering	2.4.2 Physics Filters	UW	GR	VAN SANTEN, JACOB	Online filters / SuperDST		0.15			0.15
2.4 Triggering And Filtering	2.4.2 Physics Filters	**US Total**				0.00	2.00	1.75	0.00	3.75
2.4 Triggering And Filtering	2.4.2 Physics Filters	SU	GR	BOHM, CHRISTIAN	Track engine				0.10	0.10
2.4 Triggering And Filtering	2.4.2 Physics Filters	CHIBA	SC	ISHIHARA, AYA	EHE and Brights WG co-chair				0.25	0.25
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	SC	GORA, DARIUSZ	Online Filter Alerts / NToO program				0.15	0.15
2.4 Triggering And Filtering	2.4.2 Physics Filters	RWTH	PO	BOERSMA, DAVID RWTH	Gal Cen Filter & Moon Filter				0.15	0.15
2.4 Triggering And Filtering	2.4.2 Physics Filters	RWTH	GR	BISSOK, MARTIN	Gal Cen Filter				0.10	0.10
2.4 Triggering And Filtering	2.4.2 Physics Filters	RWTH	GR	RWTH GR	Development of the slow monopole trigger				0.20	0.20
2.4 Triggering And Filtering	2.4.2 Physics Filters	SU	KE	FINLEY, CHAD SU	Point Source WG Chair				0.25	0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	SU	GR	ZOLL, MARCEL	Filters and Simulations				0.15	0.15
2.4 Triggering And Filtering	2.4.2 Physics Filters	SU	GR	DANNINGER, MATTIAS	WIMP Trigger & Filter				0.10	0.10
2.4 Triggering And Filtering	2.4.2 Physics Filters	ULB	GR	ULB GR	Study of Tau Filters at South Pole				0.10	0.10
2.4 Triggering And Filtering	2.4.2 Physics Filters	UU	KE	HALLGREN, ALLAN	Online filter development				0.20	0.20
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	UU	GR	HENRIC, TAAVOLA	Online filter development & testing				0.20	0.20
2.4 Triggering And Filtering	2.4.2 Physics Filters	UU	GR	STROM, RICKARD	Online filter development & testing				0.20	0.20
2.4 Triggering And Filtering	2.4.2 Physics Filters	VUB	PO	LABARE, MATHIEU	Filter for Southern sky muons				0.25	0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	VUB	GR	KUNNEN JAN	Filter for Southern sky muons				0.50	0.50
2.4 Triggering And Filtering	2.4.2 Physics Filters	BARBADOS	KE	SEUNARINE, SURUJ	Work on cascade filter				0.15	0.15
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	DPNC Genev	KE	MONTARULI, TERESA	Online filtering				0.20	0.20
2.4 Triggering And Filtering	2.4.2 Physics Filters	DPNC Genev	PO	AGUILAR SANCHEZ JUAN A	Online filtering				0.20	0.20
2.4 Triggering And Filtering	2.4.2 Physics Filters	BONN	KE	KOWALSKI, MAREK	Cascade WG Co-Chair				0.25	0.25
2.4 Triggering And Filtering	2.4.2 Physics Filters	BONN	GR	FRANCKOWIAK, ANNA	Alert System for follow-up				0.10	0.10
2.4 Triggering And Filtering	2.4.2 Physics Filters	BONN	GR	HOMRIER, ANDREAS	Alert System for follow-up				0.10	0.10
2.4 Triggering And Filtering	2.4.2 Physics Filters	**Non-US Total**							4.75	4.75
2.4 Triggering And Filtering	**2.4.2 Physics Filters**					0.00	2.00	1.75	4.75	8.50
2.4 Triggering And Filtering	**WBS L2 Total**					0.30	2.55	1.95	5.35	10.15
2.5 Data Quality, Reconstructio	2.5 Data Quality, Reconstruction & Simulation Tools	BARBADOS	KE	SEUNARINE, SURUJ	flasher runs for inice calibration of saturation, flasher and Standard Candle runs for absolute energy calibration for cascades.				0.15	0.15
2.5 Data Quality, Reconstructio	2.5 Data Quality, Reconstruction & Simulation Tools	**Non-US Total**							0.15	0.15
2.5 Data Quality, Reconstructio	**2.5 Data Quality, Reconstruction & Simulation Tools**								0.15	0.15
2.5 Data Quality, Reconstructio	2.5.1 Simulation Programs	LBNL	PO	CHANG, HYON HA	DOM simulator & calibrator		0.10			0.10
2.5 Data Quality, Reconstructio	2.5.1 Simulation Programs	LBNL	PO	GERHARDT, LISA	Simulation Programs: cmc		0.20			0.20
2.5 Data Quality, Reconstructio	2.5.1 Simulation Programs	SUBR	KE	FAZELY, ALI	GEANT Simulation			0.15		0.15
2.5 Data Quality, Reconstructio	2.5.1 Simulation Programs	SUBR	KE	IMLAY, RICHARD	Simulation Programs			0.15		0.15
2.5 Data Quality, Reconstructio	2.5.1 Simulation Programs	UA	PO	ZARZHITZKY, PAVEL	Simulation verification		0.30			0.30
2.5 Data Quality, Reconstructio	2.5.1 Simulation Programs	UA	GR	XU, DONGLIAN	DeepCore simulation verification		0.10			0.10
2.5 Data Quality, Reconstructio	2.5.1 Simulation Programs	UA	GR	LARSON, MICHAEL	Noise simulation		0.15			0.15
2.5 Data Quality, Reconstructio	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, Reconstructio	2.5.1 Simulation Programs	UD	PO	HUSSAIN, SHAHID	Ice Properties Simulation		0.30			0.30
2.5 Data Quality, Reconstructio	2.5.1 Simulation Programs	UD	GR	RUZYBAEV, BAKHTIYAR	Ice Properties Simulation		0.30			0.30
2.5 Data Quality, Reconstructio	2.5.1 Simulation Programs	UD	GR	UD GR	Simulation Programs: sim-services		0.30			0.30
2.5 Data Quality, Reconstructio	2.5.1 Simulation Programs	UMD	PO	OLIVAS, ALEX	Simulation Software Programs coordinator	0.40				0.40
2.5 Data Quality, Reconstructio	2.5.1 Simulation Programs	UMD	PO	WISSING, HENRIKE	Maintain Detector Simulation (IceSim)		0.13			0.13
2.5 Data Quality, Reconstructio	2.5.1 Simulation Programs	UMD	GR	REDL, PETER	Maintain Detector Simulation (IceSim)		0.25			0.25
2.5 Data Quality, Reconstructio	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, Reconstructio	2.5.1 Simulation Programs	UW	SC	HOSHINA, KOTOYO	nugen maintenance	0.25				0.25
2.5 Data Quality, Reconstructio	2.5.1 Simulation Programs	UW	PO	ABBASI, RASHA	DST data checking, Sun shadow, online filter support		0.25			0.25
2.5 Data Quality, Reconstructio	2.5.1 Simulation Programs	UW	PO	KOPPER, CLAUDIO	Direct photon propogation, Deep Core support			0.20		0.20
2.5 Data Quality, Reconstructio	2.5.1 Simulation Programs	UW	GR	RIEDEL, BENEDICT	Supernova DAQ, simulation		0.20			0.20
2.5 Data Quality, Reconstructio	2.5.1 Simulation Programs	UW	GR	WHITEHORN, NATHAN	Photonics tables		0.20			0.20
2.5 Data Quality, Reconstructio	2.5.1 Simulation Programs	UW	TE	DIAZ-VELEZ, JUAN CARLOS	Maintain Simulation Production Software	0.20				0.20
2.5 Data Quality, Reconstructio	2.5.1 Simulation Programs	**US Total**				1.70	2.78	0.50		4.98

WBS L2		WBS L3		Institution	Labor Cat.	Names	Tasks	NSF M&O Core	NSF Base Grants	U.S. IN-KIND	Non U.S. In-Kind	Grand Total
Cat. Description		**Cat.** Description		**Cat.** Description		**Cat.** Description						
AD Administration		GR Graduate Student		PO Postdoctoral Scientist		TE Technician						
CS Computer Science Eng.		KE Key Personnel/Faculty		SC Scientist		WO Winterover						
EN Engineer		MA Management		SE Senior Engineer								
2.5 Data Quality, Reconstructio		2.5.1 Simulation Programs		DTMND	GR	MILKE, NATALIE	Simulation Programs: noise-generator				0.20	0.20
2.5 Data Quality, Reconstructio		2.5.1 Simulation Programs		SU	KE	HULTQVIST, KLAS	Simulation Work				0.10	0.10
2.5 Data Quality, Reconstructio		2.5.1 Simulation Programs		SU	GR	FLIS, SAMUEL	DOM simulation				0.15	0.15
2.5 Data Quality, Reconstructio		2.5.1 Simulation Programs		UOX	KE	SARKAR, SUBIR	Yellow Book-maintenance				0.10	0.10
2.5 Data Quality, Reconstructio		2.5.1 Simulation Programs		GENT	SC	UGENT SC	Support IceTop Simulations, IceTop Calibrations, IceTop Reconstruction				0.10	0.10
2.5 Data Quality, Reconstructio		2.5.1 Simulation Programs		GENT	GR	UGENT GR	Support IceTop Simulations, IceTop Calibrations, IceTop Reconstruction				0.40	0.40
2.5 Data Quality, Reconstructio		2.5.1 Simulation Programs		BOCHUM	KE	BECKER, JULIA	Update MMC from Java to C++				0.10	0.10
2.5 Data Quality, Reconstructio		2.5.1 Simulation Programs		BOCHUM	GR	FEDYNITCH, ANATOLI	Update MMC from Java to C++				0.10	0.10
2.5 Data Quality, Reconstructio		2.5.1 Simulation Programs		BOCHUM	GR	OLIVO, MARTINO	Monte Carlo Validation				0.10	0.10
2.5 Data Quality, Reconstructio		2.5.1 Simulation Programs		RWTH	GR	BLUMENTHAL, JAN	Photonics Production				0.15	0.15
2.5 Data Quality, Reconstructio		2.5.1 Simulation Programs		EPFL	KE	RIBORDY, MATHIEU	Supernova detector (extension) responses				0.10	0.10
2.5 Data Quality, Reconstructio		2.5.1 Simulation Programs		EPFL	PO	BRUIJN, RONALD	Supernova detector (extension) responses				0.20	0.20
2.5 Data Quality, Reconstructio		2.5.1 Simulation Programs		**Non-US Total**							1.80	1.80
2.5 Data Quality, Reconstructio		**2.5.1 Simulation Programs**						1.70	2.78	0.50	1.80	6.78
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		LBNL	GR	MIARECKI, SANDRA	Algorithm for measuring muon energy		0.30			0.30
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		PSU	PO	KOSKINEN, JASON	Integrating the GENIE Monte Carlo software into IceCube software		0.20			0.10
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		PSU	GR	DUNKMAN, MATT	develop starting track reconstruction - hybrid reco.		0.50			0.50
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		SUBR	KE	FAZELY, ALI	Reconstruction/ Analysis tools			0.15		0.15
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		SUBR	KE	IMLAY, RICHARD	Reconstruction/ Analysis tools			0.15		0.15
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		UA	GR	XU, DONGLIAN	Improvements to low energy analysis framework		0.10			0.10
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		UAA	KE	RAWLINS, KATHERINE	flat-ntuple; muon-bundle-reco; Snow correction for IceTop			0.30		0.30
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		UMD	PO	WISSING, HENRIKE	develop & test reconstruction		0.13			0.13
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		UMD	GR	REDL, PETER	Reconstruction/ Analysis tools		0.25			0.25
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		StonyBrook	PO	LESIAK-BZDAK, MARIOLA	Flashers and Standard Candle			0.10		0.10
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		StonyBrook	PO	LESIAK-BZDAK, MARIOLA	BadDomList software maintenance			0.10		0.10
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		UW	SC	CHIRKIN, DMITRY	Direct photon tracking / iceproperties calibration; FE/pulse extractor; reco S/W		0.30			0.30
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		UW	PO	AUFFENBERG, JAN	Energy Reconstruction		0.15			0.15
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		UW	GR	GLADSTONE, LAURA	Reconstruction tools-Deep Core		0.15			0.15
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		UW	GR	FEINTZIG, JACOB	Event reconstruction (spline fits)		0.15			0.15
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		UW	GR	VAN SANTEN, JACOB	Cascades		0.15			0.15
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		UW	GR	WHITEHORN, NATHAN	Energy Reconstruction		0.15			0.15
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		UWRF	KE	MADSEN, JIM	Cosmic ray shower simulations and reconstruction			0.10		0.10
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		**US Total**				0.00	2.53	0.90		3.43
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		ADELAIDE	KE	HILL, GARY	Event energy and direction reconstruction, millipede				0.40	0.40
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		ADELAIDE	GR	AARTSEN, MARK	Event energy and direction reconstruction, millipede				0.50	0.50
2.5 Data Quality, Reconstructio		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, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		CHIBA	SC	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, Reconstructio		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, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		DESY	GR	SCHöNWALD, ARNE	Cascade Reconstruction				0.10	0.10
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		DESY	GR	MIDDELL, EIKE	Cascade Reconstruction				0.20	0.20
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		RWTH	PO	BOERSMA, DAVID RWTH	Reconstruction Coordinator				0.15	0.15
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		RWTH	PO	BOERSMA, DAVID RWTH	Development of Photospline tables				0.10	0.10
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		RWTH	GR	BLUMENTHAL, JAN	Gal Cen Filter, Data processing				0.10	0.10
2.5 Data Quality, Reconstructio		2.5.2 Reconstruction/ Analysis Tools		RWTH	GR	EULER, SEBASTIAN	Finite track reconstruction				0.10	0.10

IceCube M&O Staffing Matrix sort by WBS v12.0 2012.0315

WBS L2	WBS L3	Institution	Labor Cat.	Names	Tasks	NSF M&O Core	NSF Base Grants	U.S. IN-KIND	Non U.S. In-Kind	Grand Total
Cat. Description AD Administration CS Computer Science Eng. EN Engineer	**Cat. Description** GR Graduate Student KE Key Personnel/Faculty MA Management	**Cat. Description** PO Postdoctoral Scientist SC Scientist SE Senior Engineer	**Cat. Description** TE Technician WO Winterover							
2.5 Data Quality, Reconstructio	2.5.2 Reconstruction/ Analysis Tools	RWTH	GR	VEHRING, MARKUS	Finite track reconstruction				0.15	0.15
2.5 Data Quality, Reconstructio	2.5.2 Reconstruction/ Analysis Tools	SU	GR	FLIS, SAMUEL	Energy Reconstruction				0.10	0.10
2.5 Data Quality, Reconstructio	2.5.2 Reconstruction/ Analysis Tools	SU	GR	WOLF, MARTIN	Truncated Mean, EventViewer, cluster tool				0.20	0.20
2.5 Data Quality, Reconstructio	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, Reconstructio	2.5.2 Reconstruction/ Analysis Tools	VUB	PO	BOSE, DEBANJAN	muon track reconstruction in IceCube and DeepCore, waveform feature extractor				0.25	0.25
2.5 Data Quality, Reconstructio	2.5.2 Reconstruction/ Analysis Tools	VUB	PO	LABARE, MATHIEU	muon track reconstruction in IceCube and DeepCore				0.13	0.13
2.5 Data Quality, Reconstructio	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, Reconstructio	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, Reconstructio	2.5.2 Reconstruction/ Analysis Tools	ALBERTA	KE	GRANT, DARREN	Maintenance of IceCube-Photonics interface				0.10	0.10
2.5 Data Quality, Reconstructio	2.5.2 Reconstruction/ Analysis Tools	WUPPERTAL	GR	WUPPERTAL GR	New SUSY Reconstruction, Simulation, Propagation, Monopole, Photonics				0.50	0.50
2.5 Data Quality, Reconstructio	2.5.2 Reconstruction/ Analysis Tools	MAINZ	GR	SCHATTO, KAI	PPC based tables Muon reconstruction				0.40	0.40
2.5 Data Quality, Reconstructio	2.5.2 Reconstruction/ Analysis Tools	MAINZ	GR	WIEBE, KLAUS	Angular res. Cascades				0.20	0.20
2.5 Data Quality, Reconstructio	2.5.2 Reconstruction/ Analysis Tools	HUMBOLDT	KE	KOLANOSKI, HERMANN	Reconstruction/ Analysis tools				0.10	0.10
2.5 Data Quality, Reconstructio	2.5.2 Reconstruction/ Analysis Tools	HUMBOLDT	GR	ALTMANN, DAVID	Improving the track reconstruction.				0.15	0.15
2.5 Data Quality, Reconstructio	2.5.2 Reconstruction/ Analysis Tools	BONN	GR	UBONN GR	Reconstruction/ Analysis tools				0.20	0.20
2.5 Data Quality, Reconstructio	2.5.2 Reconstruction/ Analysis Tools	BONN	GR	PANKNIN, SEBASTIAN	IC-40 L3 processing				0.20	0.20
2.5 Data Quality, Reconstructio	2.5.2 Reconstruction/ Analysis Tools	**Non-US Tota**							6.18	6.18
2.5 Data Quality, Reconstructio	**2.5.2 Reconstruction/ Analysis Tools**					0.00	2.53	0.90	6.18	9.60
2.5 Data Quality, Reconstructio	2.5.3 Data Quality	UA	KE	TOALE, PATRICK	Data Quality Lead			0.15		0.15
2.5 Data Quality, Reconstructio	2.5.3 Data Quality	**US Total**				0.00	0.00	0.15		0.15
2.5 Data Quality, Reconstructio	2.5.3 Data Quality	Munchen	PO	MPI PO	Data Quality & DeepCore				0.60	0.60
2.5 Data Quality, Reconstructio	2.5.3 Data Quality	DPNC Genev	KE	MONTARULI, TERESA	Data Quality monitoring				0.10	0.10
2.5 Data Quality, Reconstructio	2.5.3 Data Quality	DPNC Genev	PO	AGUILAR SANCHEZ JUAN A	Data and Simulation Quality				0.20	0.20
2.5 Data Quality, Reconstructio	2.5.3 Data Quality	VUB	KE	VAN EIJNDHOVEN, NICK	data quality verification				0.25	0.25
2.5 Data Quality, Reconstructio	2.5.3 Data Quality	VUB	PO	STRAHLER, ERIK	verification Deep Core data quality				0.25	0.25
2.5 Data Quality, Reconstructio	2.5.3 Data Quality	VUB	PO	BOSE, DEBANJAN	verification Deep Core data quality				0.25	0.25
2.5 Data Quality, Reconstructio	2.5.3 Data Quality	VUB	PO	LABARE, MATHIEU	verification Deep Core data quality				0.13	0.13
2.5 Data Quality, Reconstructio	2.5.3 Data Quality	VUB	PO	MILLER, JONATHAN	WIMP analysis				0.38	0.38
2.5 Data Quality, Reconstructio	2.5.3 Data Quality	**Non-US Tota**							2.15	2.15
2.5 Data Quality, Reconstructio	**2.5.3 Data Quality**					0.00	0.00	0.15	2.15	2.30
2.5 Data Quality, Reconstructio	2.5.4 Offline Data Processing	UW	PO	AUFFENBERG, JAN	Offline Data Processing - EHE		0.15			0.15
2.5 Data Quality, Reconstructio	2.5.4 Offline Data Processing	UW	PO	KOPPER, CLAUDIO	L2 processing support			0.20		0.20
2.5 Data Quality, Reconstructio	2.5.4 Offline Data Processing	UW	PO	KURAHASHI, NAOKO	Offline Level 2 Processing		0.20			0.20
2.5 Data Quality, Reconstructio	2.5.4 Offline Data Processing	UW	GR	FEINTZIG, JACOB	L2 processing, muon stream		0.20			0.20
2.5 Data Quality, Reconstructio	2.5.4 Offline Data Processing	**US Total**				0.00	0.55	0.20		0.75
2.5 Data Quality, Reconstructio	2.5.4 Offline Data Processing	RWTH	GR	RWTH GR	Development of processing scripts for L2/L1 processing				0.20	0.20
2.5 Data Quality, Reconstructio	2.5.4 Offline Data Processing	**Non-US Tota**							0.20	0.20
2.5 Data Quality, Reconstructio	**2.5.4 Offline Data Processing**					0.00	0.55	0.20	0.20	0.95
2.5 Data Quality, Reconstruct WBS L2 Total						1.70	5.85	1.75	10.48	19.78
Grand Total						29.87	14.49	7.35	31.30	83.00