

**IceCube M&O Staffing Matrix sort by WBS v13.0 2012.0927c**

WBS L2	WBS L3	Institution		Labor		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	2.1.1 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	PSU	KE	COWEN, DOUG				ExecCom member			0.20		0.20	
2.1 Program Management	2.1.1 Administration	PSU	KE	COWEN, DOUG				PINGU Co-Lead			0.25		0.25	
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	0.35				0.35	
2.1 Program Management	2.1.1 Administration	UW	KE	HALZEN, FRANCIS				Principle Investigator			0.15		0.15	
2.1 Program Management	2.1.1 Administration	UW	KE	KARLE, ALBRECHT				Associate Director for Science	0.25				0.25	
2.1 Program Management	2.1.1 Administration	UW	KE	KARLE, ALBRECHT				Coordination Committee chair	0.10				0.10	
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	YECK, JAMES				Director of Operations	0.50				0.50	
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	<b>US Total</b>								<b>3.55</b>	<b>0.30</b>	<b>1.80</b>		<b>5.65</b>
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				0.20	0.20	
2.1 Program Management	2.1.1 Administration	DESY	SC	ACKERMANN, MARKUS				Analysis Coordinator				0.35	0.35	
2.1 Program Management	2.1.1 Administration	DPNC	KE	MONTARULI, TERESA				ICB Member				0.10	0.10	
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	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				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	TJUS, JULIA				Pubcom member				0.10	0.10	
2.1 Program Management	2.1.1 Administration	<b>Non-US Total</b>											<b>3.00</b>	<b>3.00</b>
2.1 Program Management	2.1.1 Administration									<b>3.55</b>	<b>0.30</b>	<b>1.80</b>	<b>3.00</b>	<b>8.65</b>
2.1 Program Management	2.1.2 Engineering And R&D Support	KU	KE	BESSON, DAVE				EMI - Radio R&D				0.10	0.10	
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				Science Support	0.25				0.25	
2.1 Program Management	2.1.2 Engineering And R&D Support	UW	SC	DUVERNOIS, MICHAEL				EMI, Instrumentation, I/F	0.15				0.15	
2.1 Program Management	2.1.2 Engineering And R&D Support	UW	SE	LAUNDRIE, ANDREW				EMI, Instrumentation, I/F	0.10				0.10	
2.1 Program Management	2.1.2 Engineering And R&D Support	UW	SE	LAUNDRIE, ANDREW				Engineering Support	0.65				0.65	
2.1 Program Management	2.1.2 Engineering And R&D Support	UW	SE	SANDSTROM, PERRY				EMI, Instrumentation, I/F	0.25				0.25	
2.1 Program Management	2.1.2 Engineering And R&D Support	UW	SE	SANDSTROM, PERRY				Engineering Support	0.25				0.25	
2.1 Program Management	2.1.2 Engineering And R&D Support	UW	MA	HAUGEN, JAMES				Engineering Support	0.10				0.10	
2.1 Program Management	2.1.2 Engineering And R&D Support	<b>US Total</b>								<b>1.75</b>	<b>0.00</b>	<b>0.30</b>		<b>2.05</b>
2.1 Program Management	2.1.2 Engineering And R&D Support	DESY	KE	NAHNHAUER, ROLF				Acoustic R&D Support				0.10	0.10	
2.1 Program Management	2.1.2 Engineering And R&D Support	DESY	PO	KARG, TIMO				Acoustic				0.10	0.10	
2.1 Program Management	2.1.2 Engineering And R&D Support	ALBERTA	KE	GRANT, DARREN				PINGU Co-Lead				0.10	0.10	
2.1 Program Management	2.1.2 Engineering And R&D Support	RWTH	PO	LAIHEM, KARIM				Acoustic R&D Support				0.10	0.10	
2.1 Program Management	2.1.2 Engineering And R&D Support	RWTH	PO	LAIHEM, KARIM				Acoustic monitoring				0.10	0.10	
2.1 Program Management	2.1.2 Engineering And R&D Support	RWTH	GR	PAUL, LARRISA				RASTA Antenna Construction				0.10	0.10	
2.1 Program Management	2.1.2 Engineering And R&D Support	RWTH	GR	PAUL, LARRISA				SPATS SD Maintenance				0.20	0.20	
2.1 Program Management	2.1.2 Engineering And R&D Support	RWTH	GR	HEINEN, DIRK				Acoustic R&D Support				0.10	0.10	
2.1 Program Management	2.1.2 Engineering And R&D Support	ULB	KE	HANSON, KAEL				EMI/R&D				0.10	0.10	

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		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	2.1.2 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	ULB	GR	MEURES, THOMAS	EMI Measurements							0.25	0.25	
2.1 Program Management	2.1.2 Engineering And R&D Support	WUPPERTAL	KE	HELBING, KLAUS	R&D Lead							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	<b>Non-US Total</b>										1.55	1.55	
2.1 Program Management	<b>2.1.2 Engineering And R&amp;D Support</b>									1.75	0.00	0.30	1.55	3.60
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	<b>US Total</b>								0.25				0.25
2.1 Program Management	<b>2.1.3 Usap Support</b>									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 and 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	<b>US Total</b>						0.95	0.00	0.25				1.20
2.1 Program Management	<b>2.1.4 Education &amp; Outreach</b>							0.95	0.00	0.25				1.20
<b>2.1 Program Management</b>	<b>WBS L2 Total</b>							6.50	0.30	2.35	4.55			13.70
2.2 Detector Operations & Maintenance	2.2.2 Detector Operations & Maintenance	LBNL	KE	NYGREN, DAVID R	Track Engine Trigger						0.10			0.10
2.2 Detector Operations & Maintenance	2.2.2 Data Acquisition	UW	SC	KELLEY, JOHN	Deputy Maintenance and Operations Manager			0.75						0.75
2.2 Detector Operations & Maintenance	2.2.2 Detector Operations & Maintenance	UW	MA	LAITSCH, DENISE	Detector Operations Manager			1.00						1.00
2.2 Detector Operations & Maintenance	2.2.2 Detector Operations & Maintenance	<b>US Total</b>						1.75	0.00	0.10				1.85
2.2 Detector Operations & Maintenance	2.2.2 Detector Operations & Maintenance	UMH	GR	KOHENEN, GEORGES	Database Coordinator						0.10			0.10
2.2 Detector Operations & Maintenance	2.2.2 Detector Operations & Maintenance	<b>Non-US Total</b>									0.10			0.10
2.2 Detector Operations & Maintenance	<b>2.2.2 Detector Operations &amp; Maintenance</b>							1.75	0.00	0.10	0.10			1.95
2.2 Detector Operations & Maintenance	2.2.1 Run Coordination	UW	TE	Auer, Ralf	Winter Overs coordinator			0.25						0.25
2.2 Detector Operations & Maintenance	2.2.1 Run Coordination	UW	TE	UW Winter Overs	Operate Detector (Winter-Overs)			3.00						3.00
2.2 Detector Operations & Maintenance	2.2.1 Run Coordination	<b>US Total</b>						3.25	0.00	0.00				3.25
2.2 Detector Operations & Maintenance	2.2.1 Run Coordination	UC	GR	UC GR	Flasher Runs						0.10			0.10
2.2 Detector Operations & Maintenance	2.2.1 Run Coordination	BONN	PO	BOSSER, SEBASTIAN	Run Coordinator						0.50			0.50
2.2 Detector Operations & Maintenance	2.2.1 Run Coordination	<b>Non-US Total</b>									0.60			0.60
2.2 Detector Operations & Maintenance	<b>2.2.1 Run Coordination</b>							3.25	0.00	0.00	0.60			3.85
2.2 Detector Operations & Maintenance	2.2.2 Data Acquisition	LBNL	EN	STEZELBERGER, THORSTEN	Maintain DAQ Hardware (Hubs, DOR, Clocks, GPS,...)			0.15						0.15
2.2 Detector Operations & Maintenance	2.2.2 Data Acquisition	UD	KE	SECKEL, DAVID	DAQ Monitoring					0.05				0.05
2.2 Detector Operations & Maintenance	2.2.2 Data Acquisition	UW	SC	KELLEY, JOHN	DOM Cal Maintenance, DOM issues			0.15						0.15
2.2 Detector Operations & Maintenance	2.2.2 Data Acquisition	UW	SC	WENDT, CHRISTOPHER	Flasher output, flasher calibration			0.20						0.20
2.2 Detector Operations & Maintenance	2.2.2 Data Acquisition	UW	SC	WENDT, CHRISTOPHER	DOM charge response, linearity, DOM cal support			0.20						0.20
2.2 Detector Operations & Maintenance	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 & Maintenance	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 & Maintenance	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 & Maintenance	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 & Maintenance	2.2.2 Data Acquisition	UW	SE	SANDSTROM, PERRY	Maintain DAQ Hardware (Hubs, DOR, Clocks, GPS,...)			0.25						0.25
2.2 Detector Operations & Maintenance	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 & Maintenance	2.2.2 Data Acquisition	UW	GR	WEAVER, CHRISTOPHER	DOM CAL Maintenance					0.20				0.20
2.2 Detector Operations & Maintenance	2.2.2 Data Acquisition	<b>US Total</b>						4.10	0.20	0.05				4.35
2.2 Detector Operations & Maintenance	2.2.2 Data Acquisition	ULB	KE	HANSON, KAEL	Data Acquisition						0.20			0.20
2.2 Detector Operations & Maintenance	2.2.2 Data Acquisition	ULB	GR	HEEREMAN, DAVID	Develop Hit Spooling for Supernova & others							0.50		0.50
2.2 Detector Operations & Maintenance	2.2.2 Data Acquisition	ULB	GR	PINAT, ELISA	Data Acquisition							0.20		0.20
2.2 Detector Operations & Maintenance	2.2.2 Data Acquisition	<b>Non-US Total</b>									0.90			0.90
2.2 Detector Operations & Maintenance	<b>2.2.2 Data Acquisition</b>							4.10	0.20	0.05	0.90			5.25
2.2 Detector Operations & Maintenance	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 & Maintenance	2.2.3 Online Filter (Pnf)	UMD	GR	REDL, PETER	Online Filter Testing					0.25				0.25
2.2 Detector Operations & Maintenance	2.2.3 Online Filter (Pnf)	<b>US Total</b>						0.20	0.25	0.00				0.45
2.2 Detector Operations & Maintenance	<b>2.2.3 Online Filter (Pnf)</b>							0.20	0.25	0.00				0.45
2.2 Detector Operations & Maintenance	2.2.4 Sps Operations	UW	SE	SANDSTROM, PERRY	Maintain South Pole Computing H/W Infrastructure and operating systems			0.25						0.25

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		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 &	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 &	2.2.4 Sps Operations	UW	TE	WISNIEWSKI, PAUL				Networking and Security Maintenance	0.25				0.25	
2.2 Detector Operations &	2.2.4 Sps Operations	<b>US Total</b>								<b>1.25</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1.25</b>
2.2 Detector Operations &	2.2.4 Sps Operations	<b>2.2.4 Sps Operations</b>												
2.2 Detector Operations &	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 &	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 &	2.2.5 Spts Operations	<b>US Total</b>								<b>0.35</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.35</b>
2.2 Detector Operations &	2.2.5 Spts Operations	<b>2.2.5 Spts Operations</b>												
2.2 Detector Operations &	2.2.6 Experiment Control	UW	CS	JACOBSEN, JOHN (NPX)				IceCube Live Maintenance and Upgrades	0.65				0.65	
2.2 Detector Operations &	2.2.6 Experiment Control	<b>US Total</b>								<b>0.65</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.65</b>
2.2 Detector Operations &	2.2.6 Experiment Control	<b>2.2.6 Experiment Control</b>												
2.2 Detector Operations &	2.2.7 Detector Monitoring	CAU	KE	JAPARIDZE, GEORGE				Monitoring shifts				0.02	0.02	
2.2 Detector Operations &	2.2.7 Detector Monitoring	GTECH	GR	CASEY, JAMES				Monitoring shifts			0.03		0.03	
2.2 Detector Operations &	2.2.7 Detector Monitoring	KU	KE	BESSON, DAVE				Monitoring shifts				0.02	0.02	
2.2 Detector Operations &	2.2.7 Detector Monitoring	StonyBrook	KE	KIRYLUK, JOANNA				BadDomList				0.10	0.10	
2.2 Detector Operations &	2.2.7 Detector Monitoring	StonyBrook	GR	NIEDERHAUSEN, HANS				Detector Monitoring			0.05		0.05	
2.2 Detector Operations &	2.2.7 Detector Monitoring	LBNL	PO	CHANG, HYON HA				Monitoring shifts			0.09		0.09	
2.2 Detector Operations &	2.2.7 Detector Monitoring	OSU	PO	OSU PO				Monitoring shifts				0.02	0.02	
2.2 Detector Operations &	2.2.7 Detector Monitoring	OSU	PO	ROTT, CARSTEN				Maintain good run list				0.10	0.10	
2.2 Detector Operations &	2.2.7 Detector Monitoring	OSU	PO	PFENDNER, CARL				Maintain good run list				0.10	0.10	
2.2 Detector Operations &	2.2.7 Detector Monitoring	PSU	PO	CLARK, KEN				Monitoring shifts			0.03		0.03	
2.2 Detector Operations &	2.2.7 Detector Monitoring	PSU	GR	DUNKMAN, MATT				Monitoring shifts			0.03		0.03	
2.2 Detector Operations &	2.2.7 Detector Monitoring	SUBR	KE	TER-ANTONYAN, SAMVEL				Detector Monitoring				0.02	0.02	
2.2 Detector Operations &	2.2.7 Detector Monitoring	UA	PO	UA PO				Monitoring shifts			0.03		0.03	
2.2 Detector Operations &	2.2.7 Detector Monitoring	UA	GR	XU, DONGLIAN				Monitoring shifts				0.03	0.03	
2.2 Detector Operations &	2.2.7 Detector Monitoring	UA	GR	PEPPER, JAMES				Monitoring shifts				0.03	0.03	
2.2 Detector Operations &	2.2.7 Detector Monitoring	UA	GR	LARSON, MICHAEL				Monitoring shifts				0.03	0.03	
2.2 Detector Operations &	2.2.7 Detector Monitoring	UAA	KE	RAWLINS, KATHERINE				Monitoring shifts				0.02	0.02	
2.2 Detector Operations &	2.2.7 Detector Monitoring	UCB	SC	FILIMONOV, KIRILL				Coordinate Monitoring			0.10		0.10	
2.2 Detector Operations &	2.2.7 Detector Monitoring	UCB	SC	FILIMONOV, KIRILL				Coordinate Monitoring	0.25				0.25	
2.2 Detector Operations &	2.2.7 Detector Monitoring	UCB	SC	UCB SC				Monitoring shifts			0.10		0.10	
2.2 Detector Operations &	2.2.7 Detector Monitoring	UCB	GR	UCB GR				Monitoring shifts			0.10		0.10	
2.2 Detector Operations &	2.2.7 Detector Monitoring	UCI	PO	SILVERSTRI, ANDREA				Monitoring shifts				0.01	0.01	
2.2 Detector Operations &	2.2.7 Detector Monitoring	UCI	GR	HANSON, JORDAN				Monitoring shifts				0.01	0.01	
2.2 Detector Operations &	2.2.7 Detector Monitoring	UD	PO	KUWABARA, TAKAO				Temp. & Pressure atmospheric monitoring				0.30	0.30	
2.2 Detector Operations &	2.2.7 Detector Monitoring	UMD	PO	UMD PO				Monitoring shifts			0.03		0.03	
2.2 Detector Operations &	2.2.7 Detector Monitoring	UMD	GR	UMD GR				Monitoring shifts			0.06		0.06	
2.2 Detector Operations &	2.2.7 Detector Monitoring	UW	PO	UW PO				Monitoring shifts			0.12		0.12	
2.2 Detector Operations &	2.2.7 Detector Monitoring	UW	GR	UW GR				Monitoring shifts			0.12		0.12	
2.2 Detector Operations &	2.2.7 Detector Monitoring	<b>US Total</b>								<b>0.25</b>	<b>0.98</b>	<b>0.71</b>	<b>0.71</b>	<b>1.94</b>
2.2 Detector Operations &	2.2.7 Detector Monitoring	CHIBA	GR	CHIBA GR				Detector Monitoring				0.03	0.03	
2.2 Detector Operations &	2.2.7 Detector Monitoring	DESY	SC	DESY SC				Detector Monitoring				0.05	0.05	
2.2 Detector Operations &	2.2.7 Detector Monitoring	DESY	GR	DESY GR				Detector Monitoring				0.12	0.12	
2.2 Detector Operations &	2.2.7 Detector Monitoring	DTMND	GR	DTMD GR				Detector Monitoring				0.03	0.03	
2.2 Detector Operations &	2.2.7 Detector Monitoring	EPFL	PO	BRUIJN, RONALD				Detector Monitoring				0.03	0.03	
2.2 Detector Operations &	2.2.7 Detector Monitoring	Munchen	GR	MPI GR				Detector Monitoring				0.05	0.05	
2.2 Detector Operations &	2.2.7 Detector Monitoring	RWTH	GR	PAUL, LARRISA				RASTA Data Monitoring				0.10	0.10	
2.2 Detector Operations &	2.2.7 Detector Monitoring	RWTH	GR	RWTH GR				Monitoring (4 weeks)				0.12	0.12	
2.2 Detector Operations &	2.2.7 Detector Monitoring	SU	GR	SU GR				Detector Monitoring				0.06	0.06	
2.2 Detector Operations &	2.2.7 Detector Monitoring	UC	GR	UC GR				Detector Monitoring				0.02	0.02	
2.2 Detector Operations &	2.2.7 Detector Monitoring	ULB	GR	ULB GR				Detector Monitoring				0.06	0.06	
2.2 Detector Operations &	2.2.7 Detector Monitoring	UOX	KE	SARKAR, SUBIR				Detector Monitoring				0.02	0.02	
2.2 Detector Operations &	2.2.7 Detector Monitoring	UU	GR	UU GR				Monitoring Shifts				0.03	0.03	
2.2 Detector Operations &	2.2.7 Detector Monitoring	VUB	PO	VUB PO				Monitoring shifts				0.06	0.06	
2.2 Detector Operations &	2.2.7 Detector Monitoring	VUB	GR	VUB GR				Monitoring shifts				0.06	0.06	
2.2 Detector Operations &	2.2.7 Detector Monitoring	WUPPERTAL	GR	WUPPERTAL GR				South Pole EMI Monitoring				0.15	0.15	
2.2 Detector Operations &	2.2.7 Detector Monitoring	WUPPERTAL	GR	WUPPERTAL GR				AURA, SPATS, surface antenna operations (RASTA)				0.45	0.45	
2.2 Detector Operations &	2.2.7 Detector Monitoring	MAINZ	GR	UM GR				Detector Monitoring				0.05	0.05	
2.2 Detector Operations &	2.2.7 Detector Monitoring	GENT	GR	UGENT GR				Detector Monitoring				0.03	0.03	
2.2 Detector Operations &	2.2.7 Detector Monitoring	DPNC	GR	ASEN, CHRISTOV				Detector Monitoring				0.20	0.20	
2.2 Detector Operations &	2.2.7 Detector Monitoring	DPNC	GR	RAAMEZ MOHAMED				Detector Monitoring				0.10	0.10	
2.2 Detector Operations &	2.2.7 Detector Monitoring	BONN	GR	UBONN GR				Detector Monitoring				0.03	0.03	
2.2 Detector Operations &	2.2.7 Detector Monitoring	BOCHUM	GR	SCHÖNEBERG, SEBASTIAN				Detector Monitoring				0.03	0.03	
2.2 Detector Operations &	2.2.7 Detector Monitoring	<b>Non-US Total</b>								<b>0.25</b>	<b>0.98</b>	<b>0.71</b>	<b>1.88</b>	<b>1.88</b>
2.2 Detector Operations &	2.2.7 Detector Monitoring	<b>2.2.7 Detector Monitoring</b>												
2.2 Detector Operations &	2.2.8 Detector Calibration	GTECH	GR	CASEY, JAMES				Bubble studies with flashers			0.20		0.20	
2.2 Detector Operations &	2.2.8 Detector Calibration	UA	KE	WILLIAMS, DAWN				managing flasher runs and other calibrations (stage 2 geometry)				0.20	0.20	
2.2 Detector Operations &	2.2.8 Detector Calibration	UA	GR	XU, DONGLIAN				Low-energy cascade calibration with flashers			0.10		0.10	
2.2 Detector Operations &	2.2.8 Detector Calibration	UA	GR	PEPPER, JAMES				Verification monitoring integration into IceCube Live			0.10		0.10	
2.2 Detector Operations &	2.2.8 Detector Calibration	UCB	SC	WOSCHNAGG, KURT				Calibration Lead			0.10		0.10	
2.2 Detector Operations &	2.2.8 Detector Calibration	UCB	GR	UCB GR				Calibration			0.10		0.10	
2.2 Detector Operations &	2.2.8 Detector Calibration	UW	SC	WENDT, CHRISTOPHER				Absolute DOM sensitivity	0.40				0.40	
2.2 Detector Operations &	2.2.8 Detector Calibration	UW	GR	FEINTZIG, JACOB				Ice Properties			0.15		0.15	
2.2 Detector Operations &	2.2.8 Detector Calibration	UW	GR	JERO, KYLE				DOM Linearity, sensitivity			0.15		0.15	
2.2 Detector Operations &	2.2.8 Detector Calibration	UW	GR	JERO, KYLE				Ice properties (anisotropy) Base Grants			0.25		0.25	
2.2 Detector Operations &	2.2.8 Detector Calibration	UW	GR	VAN SANTEN, JACOB				Calibration of DOM waveforms			0.10		0.10	
2.2 Detector Operations &	2.2.8 Detector Calibration	<b>US Total</b>								<b>0.40</b>	<b>1.25</b>	<b>0.20</b>	<b>1.85</b>	
2.2 Detector Operations &	2.2.8 Detector Calibration	DESY	GR	ACHIM STOESSL				Flasher Analysis				0.20	0.20	

**IceCube M&O Staffing Matrix sort by WBS v13.0 2012.0927c**

WBS L2	WBS L3	Institution		Labor		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	WE	Winterover							
EN	Engineer	MA	Management	SE	Senior Engineer											
2.2 Detector Operations &	2.2.8 Detector Calibration	<b>Non-US Total</b>										0.20	0.20			
2.2 Detector Operations &	2.2.8 Detector Calibration											0.40	1.25	0.20	0.20	2.05
2.2 Detector Operations &	2.2.9 Ictop Operations	UD	SC	TILAV, SERAP	Coordinate IceTop Operations				1.00					1.00		
2.2 Detector Operations &	2.2.9 Ictop Operations	UWRF	KE	SPICZAK, GLENN	IceTop tank Monitoring						0.03			0.03		
2.2 Detector Operations &	2.2.9 Ictop Operations	<b>US Total</b>										1.00	0.00	0.03	1.03	
2.2 Detector Operations &	2.2.9 Ictop Operations											1.00	0.00	0.03	0.00	1.03
2.2 Detector Operations &	2.2.10 Supernova Operations	UW	KE	MARUYAMA, REINA	Supernova DAQ and Simulation tools						0.15			0.15		
2.2 Detector Operations &	2.2.10 Supernova Operations	UW	GR	RIEDEL, BENEDIKT	Supernova DAQ					0.15				0.15		
2.2 Detector Operations &	2.2.10 Supernova Operations	<b>US Total</b>										0.00	0.15	0.15	0.00	0.30
2.2 Detector Operations &	2.2.10 Supernova Operations	MAINZ	GR	KROLL, GÖSTA	SuperNova Operations						0.20			0.20		
2.2 Detector Operations &	2.2.10 Supernova Operations	MAINZ	GR	EBERHARD, BENJAMIN	SuperNova Operations						0.50			0.50		
2.2 Detector Operations &	2.2.10 Supernova Operations	MAINZ	GR	BAUM, VOLKER	SuperNova Operations						0.50			0.50		
2.2 Detector Operations &	2.2.10 Supernova Operations	EPFL	KE	RIBORDY, MATHIEU	Development of the multi-hit detection technique							0.20		0.20		
2.2 Detector Operations &	2.2.10 Supernova Operations	EPFL	PO	BRUIJN, RONALD	Development of the multi-hit detection technique							0.32		0.32		
2.2 Detector Operations &	2.2.10 Supernova Operations	<b>Non-US Total</b>										1.72	1.72			
2.2 Detector Operations &	2.2.10 Supernova Operations											0.00	0.15	0.15	1.72	2.02
2.2 Detector Operations &	2.2.10 Supernova Operations											13.20	2.83	1.24	5.40	22.66
2.3 Computing And Data M	2.3.1 Core Software	UMD	GR	HELLAUER, ROBERT	Core Software					0.25				0.25		
2.3 Computing And Data M	2.3.1 Core Software	UMD	GR	MEAGHER, KEVIN	Core Software					0.50				0.50		
2.3 Computing And Data M	2.3.1 Core Software	UW	TE	DIAZ-VELEZ, JUAN CARLOS	Simulation Programs: diplopia				0.80					0.80		
2.3 Computing And Data M	2.3.1 Core Software	UW	TE	FADIRAN, OLADIPO	Maintain Data Processing Software				0.20					0.20		
2.3 Computing And Data M	2.3.1 Core Software	UW	PO	WHITEHORN, NATHAN	IceTray support, software maintenance					0.20				0.20		
2.3 Computing And Data M	2.3.1 Core Software	UW	PO	NEILSON, NAKO	IceTray Support (Q frame)					0.10				0.10		
2.3 Computing And Data M	2.3.1 Core Software	<b>US Total</b>										1.00	1.05	0.00	2.05	
2.3 Computing And Data M	2.3.1 Core Software	UU	SC	BOERSMA, DAVID	Maintain Reconstruction Framework						0.10			0.10		
2.3 Computing And Data M	2.3.1 Core Software	<b>Non-US Total</b>										0.10	0.10			
2.3 Computing And Data M	2.3.1 Core Software											1.00	1.05	0.00	0.10	2.15
2.3 Computing And Data M	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 M	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 M	2.3.2 Data Storage & Transfer	UW	TE	Auer, Ralf	Maintain and Operate Data Storage Infrastructure				0.38					0.38		
2.3 Computing And Data M	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 M	2.3.2 Data Storage & Transfer	<b>US Total</b>										2.08	0.00	0.00	2.08	
2.3 Computing And Data M	2.3.2 Data Storage & Transfer	DESY	GR	SCHÖNWALD, ARNE	Data transfer UW-DESY						0.10			0.10		
2.3 Computing And Data M	2.3.2 Data Storage & Transfer	<b>Non-US Total</b>										0.10	0.10			
2.3 Computing And Data M	2.3.2 Data Storage & Transfer											2.08	0.00	0.00	0.10	2.18
2.3 Computing And Data M	2.3.3 Computing Resources	PSU	PO	CLARK, KEN	Coordination and Support for Grid and distributed computing				0.25					0.25		
2.3 Computing And Data M	2.3.3 Computing Resources	SUBR	KE	TER-ANTONYAN, SAMVEL	LONI Grid computing						0.30			0.30		
2.3 Computing And Data M	2.3.3 Computing Resources	UW	TE	SKARLUPKA, HEATH	Maintain Core High Performance Computing Systems				1.00					1.00		
2.3 Computing And Data M	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 M	2.3.3 Computing Resources	UW	TE	BELLINGER, JIM	Maintain Core High Performance Computing Systems				0.50					0.50		
2.3 Computing And Data M	2.3.3 Computing Resources	UW	TE	WISNIEWSKI, PAUL	Maintain Data Center Networking and Security				0.75					0.75		
2.3 Computing And Data M	2.3.3 Computing Resources	UW	TE	Auer, Ralf	Maintain Data Center Infrastructure				0.38					0.38		
2.3 Computing And Data M	2.3.3 Computing Resources	<b>US Total</b>										3.88	0.00	0.30	4.18	
2.3 Computing And Data M	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 M	2.3.3 Computing Resources	DESY	GR	JACOBI, EMANUEL	Reconstruction Release Manager , Maintain Reconstruction Framework						0.20			0.20		
2.3 Computing And Data M	2.3.3 Computing Resources	UU	GR	TAAVOLA, HENRIC	Computing resources						0.20			0.20		
2.3 Computing And Data M	2.3.3 Computing Resources	DTMND	SC	PIELOTH, DAMIAN	Coordinate GRID computing in Germany						0.25			0.25		
2.3 Computing And Data M	2.3.3 Computing Resources	SU	SC	SU SC	Computing Resources						0.40			0.40		
2.3 Computing And Data M	2.3.3 Computing Resources	UMH	GR	KOHNNEN, GEORGES	IC database management						0.30			0.30		
2.3 Computing And Data M	2.3.3 Computing Resources	<b>Non-US Total</b>										3.35	3.35			
2.3 Computing And Data M	2.3.3 Computing Resources											3.88	0.00	0.30	3.35	7.53
2.3 Computing And Data M	2.3.4 Data Production Processing	UW	GR	SANTANDER, MARCOS	Moon Shadow online					0.15				0.15		
2.3 Computing And Data M	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		



IceCube M&O Staffing Matrix sort by WBS v13.0 2012.0927c

WBS L2	WBS L3	Institution		Labor		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							
2.3 Computing And Data M	2.3.4 Data Production Processing	<b>US Total</b>								0.50	0.15	0.00		0.65
2.3 Computing And Data M	2.3.4 Data Production Processing	<b>Non-US Total</b>											0.00	0.00
2.3 Computing And Data M	<b>2.3.4 Data Production Processing</b>									<b>0.50</b>	<b>0.15</b>	<b>0.00</b>	<b>0.00</b>	<b>0.65</b>
2.3 Computing And Data M	2.3.5 Simulation Production	LBNL	PO	GERHARDT,LISA	Simulation Production on PDSF					0.20			0.20	
2.3 Computing And Data M	2.3.5 Simulation Production	PSU	PO	KOSKINEN, JASON	Simulation Production					0.08			0.08	
2.3 Computing And Data M	2.3.5 Simulation Production	PSU	PO	CLARK, KEN	Simulation Production					0.08			0.08	
2.3 Computing And Data M	2.3.5 Simulation Production	UD	PO	TAMBURRO, ALESSIO	IceTop Simulation Production					0.35			0.35	
2.3 Computing And Data M	2.3.5 Simulation Production	UD	PO	HUSSAIN, SHAHID	IceTop Simulation Production						0.15		0.15	
2.3 Computing And Data M	2.3.5 Simulation Production	UMD	GR	CHRISTY, BRIAN	Simulation Production coordination					0.25			0.25	
2.3 Computing And Data M	2.3.5 Simulation Production	UW	SC	DESIATI, PAOLO	Coordination of Simulation Production				0.20				0.20	
2.3 Computing And Data M	2.3.5 Simulation Production	UW	SC	DESIATI, PAOLO	Simulation Production panel chair				0.20				0.20	
2.3 Computing And Data M	2.3.5 Simulation Production	UW	GR	MCNALLY, FRANK	IceTop Simulation Production/ Production / Data Processing					0.30			0.30	
2.3 Computing And Data M	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 M	2.3.5 Simulation Production	<b>US Total</b>								<b>1.00</b>	<b>1.26</b>	<b>0.15</b>		<b>2.41</b>
2.3 Computing And Data M	2.3.5 Simulation Production	DESY	SC	GORA, DARIUSZ	Simulation Production Cluster					0.20			0.20	
2.3 Computing And Data M	2.3.5 Simulation Production	DESY	PO	KARG, TIMO	Simulation Production							0.20	0.20	
2.3 Computing And Data M	2.3.5 Simulation Production	DESY	GR	DESY GR	Simulation Production Cluster							0.15	0.15	
2.3 Computing And Data M	2.3.5 Simulation Production	DTMND	GR	DTMD GR	Simulation Production							0.40	0.40	
2.3 Computing And Data M	2.3.5 Simulation Production	RWTH	GR	PAUL, LARRISA	Simulation Production on cluster/GRID							0.30	0.30	
2.3 Computing And Data M	2.3.5 Simulation Production	RWTH	GR	LEIF RADEL	Geant Simulations							0.10	0.10	
2.3 Computing And Data M	2.3.5 Simulation Production	RWTH	GR	WALLRAFF, MARIUS	Simulation Production on GPU							0.10	0.10	
2.3 Computing And Data M	2.3.5 Simulation Production	ULB	PO	ULB PO	Computer Cluster - simulation							0.30	0.30	
2.3 Computing And Data M	2.3.5 Simulation Production	VUB	PO	MILLER, JONATHAN	Ice properties and flasher runs							0.13	0.13	
2.3 Computing And Data M	2.3.5 Simulation Production	ALBERTA	KE	GRANT, DARREN	WestGrid computing							0.10	0.10	
2.3 Computing And Data M	2.3.5 Simulation Production	ALBERTA	GR	WOOD, TANIA	WestGrid computing							0.20	0.20	
2.3 Computing And Data M	2.3.5 Simulation Production	WUPPERTAL	GR	WUPPERTAL GR	Simulation Production							0.20	0.20	
2.3 Computing And Data M	2.3.5 Simulation Production	MAINZ	GR	WIEBE, KLAUS	Simulation Production							0.10	0.10	
2.3 Computing And Data M	2.3.5 Simulation Production	UMH	GR	KOHNNEN, GEORGES	Simulation Production							0.25	0.25	
2.3 Computing And Data M	2.3.5 Simulation Production	EPFL	PO	BRUIJN, RONALD	Run cluster EPFL							0.15	0.15	
2.3 Computing And Data M	2.3.5 Simulation Production	<b>Non-US Total</b>								<b>2.88</b>				<b>2.88</b>
2.3 Computing And Data M	<b>2.3.5 Simulation Production</b>									<b>1.00</b>	<b>1.26</b>	<b>0.15</b>	<b>2.88</b>	<b>5.29</b>
2.3 Computing And Data M	<b>WBS L2 Total</b>									<b>8.45</b>	<b>2.46</b>	<b>0.45</b>	<b>6.43</b>	<b>17.79</b>
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	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	<b>US Total</b>								<b>0.30</b>	<b>0.45</b>	<b>0.20</b>		<b>0.95</b>
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	DESY	PO	BERGHAUS, PATRICK	TFT Board member					0.10			0.10	
2.4 Triggering And Filtering	2.4.1 TFT Coordination	DESY	PO	KARG, TIMO	TFT Board member					0.10			0.10	
2.4 Triggering And Filtering	2.4.1 TFT Coordination	DPNC	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	<b>Non-US Total</b>								<b>0.50</b>				<b>0.50</b>
2.4 Triggering And Filtering	<b>2.4.1 TFT Coordination</b>									<b>0.30</b>	<b>0.45</b>	<b>0.20</b>	<b>0.50</b>	<b>1.45</b>
2.4 Triggering And Filtering	2.4.2 Triggering And Filtering	UA	GR	LARSON, MICHAEL	Track engine					0.15			0.15	
2.4 Triggering And Filtering	2.4.2 Triggering And Filtering	UA	GR	PEPPER, JAMES	2013 DeepCore filter and L2 proposal					0.20			0.20	
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	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	DEYOUNG, TYCE	Low Energy WG - Co Chair						0.20		0.20	
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	GTECH	GR	DAUGHETEE, JACOB	Deep Core South Pole filter					0.15			0.15	
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	
2.4 Triggering And Filtering	2.4.2 Physics Filters	OSU	PO	ROTT, CARSTEN	WIMP WG Co-Chair						0.25		0.25	
2.4 Triggering And Filtering	2.4.2 Physics Filters	UWRF	KE	SEUNARINE, SURUJ	Work on cascade filter					0.20			0.20	
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	GR	WEAVER, CHRISTOPHER	Online filters						0.10		0.10	
2.4 Triggering And Filtering	2.4.2 Physics Filters	<b>US Total</b>								<b>0.00</b>	<b>2.35</b>	<b>1.40</b>	<b>0.00</b>	<b>3.75</b>
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	ALBERTA	KE	GRANT, DARREN	Low Energy WG Co-Chair							0.25	0.25	
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	DESY	PO	BERGHAUS, PATRICK	moun channel WG Co. Chair					0.25			0.25	
2.4 Triggering And Filtering	2.4.2 Physics Filters	UU	SC	BOERSMA, DAVID	Develop Moon shadow and Galactic center filters							0.15	0.15	

**IceCube M&O Staffing Matrix sort by WBS v13.0 2012.0927c**

WBS L2	WBS L3	Institution		Labor		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	WE	Winterover						
EN	Engineer	MA	Management	SE	Senior Engineer										
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	SU	Filters and Simulations						0.15	0.15		
2.4 Triggering And Filtering	2.4.2 Physics Filters	SU	GR	DANNINGER, MATTIAS	SU	WIMP Trigger & Filter						0.10	0.10		
2.4 Triggering And Filtering	2.4.2 Physics Filters	ULB	GR	BECHET, SABRIN	ULB	Development of tau --> muon filter						0.15	0.15		
2.4 Triggering And Filtering	2.4.2 Physics Filters	UU	KE	HALLGREN, ALLAN	UU	Online filter development						0.20	0.20		
2.4 Triggering And Filtering	2.4.2 Physics Filters	UU	KE	DE LOS HEROS, CARLOS	UU	WIMP WG Chair						0.25	0.25		
2.4 Triggering And Filtering	2.4.2 Physics Filters	UU	GR	STROM, RICKARD	UU	Online filter development & testing						0.20	0.20		
2.4 Triggering And Filtering	2.4.2 Physics Filters	VUB	PO	LABARE, MATHIEU	VUB	Filter for Southern sky muons						0.25	0.25		
2.4 Triggering And Filtering	2.4.2 Physics Filters	VUB	GR	KUNNEN JAN	VUB	Filter for Southern sky muons						0.50	0.50		
2.4 Triggering And Filtering	2.4.2 Physics Filters	WUPPERTAL	KE	HELBING, KLAUS	WUPPERTAL	Exotics- WG Chair						0.25	0.25		
2.4 Triggering And Filtering	2.4.2 Physics Filters	WUPPERTAL	GR	WUPPERTAL GR	WUPPERTAL	New SUSY Filter						0.20	0.20		
2.4 Triggering And Filtering	2.4.2 Physics Filters	DPNC	KE	MONTARULI, TERESA	DPNC	Online filtering						0.10	0.10		
2.4 Triggering And Filtering	2.4.2 Physics Filters	DPNC	PO	AGUILAR SANCHEZ JUAN A	DPNC	Online filtering						0.10	0.10		
2.4 Triggering And Filtering	2.4.2 Physics Filters	DPNC	GR	ASEN, CHRISTOV	DPNC	Online filtering						0.10	0.10		
2.4 Triggering And Filtering	2.4.2 Physics Filters	DPNC	GR	RAAMEZ MOHAMED	DPNC	Muon/EHE Filter						0.20	0.20		
2.4 Triggering And Filtering	2.4.2 Physics Filters	BONN	KE	KOWALSKI, MAREK	BONN	Cascade WG Co-Chair						0.25	0.25		
2.4 Triggering And Filtering	2.4.2 Physics Filters	BONN	GR	FRANCKOWIAK, ANNA	BONN	Alert System for follow-up						0.10	0.10		
2.4 Triggering And Filtering	2.4.2 Physics Filters	BONN	GR	HOMRIER, ANDREAS	BONN	Alert System for follow-up						0.10	0.10		
2.4 Triggering And Filtering	2.4.2 Physics Filters	<b>Non-US Total</b>												<b>4.50</b>	<b>4.50</b>
2.4 Triggering And Filtering	2.4.2 Physics Filters	<b>2.4.2 Physics Filters</b>									<b>0.00</b>	<b>2.35</b>	<b>1.40</b>	<b>4.50</b>	<b>8.25</b>
2.4 Triggering And Filtering	WBS L2 Total	<b>2.4 Triggering And Filtering WBS L2 Total</b>									<b>0.30</b>	<b>2.80</b>	<b>1.60</b>	<b>5.00</b>	<b>9.70</b>
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	LBNL	PO	CHANG, HYON HA	LBNL	DOM simulator & calibrator						0.10	0.10		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	LBNL	PO	GERHARDT, LISA	LBNL	Simulation Programs: cmc						0.20	0.20		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	SUBR	KE	FAZELY, ALI	SUBR	GEANT Simulation						0.15	0.15		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	SUBR	SC	XIANWU, XU	SUBR	Simulation Programs						0.15	0.15		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	KE	PO	TOALE, PATRICK	KE	Trigger simulation						0.10	0.10		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	UA	GR	LARSON, MICHAEL	UA	Noise simulation						0.15	0.15		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	UA	KE	TOALE, PATRICK	UA	Trigger simulation						0.10	0.10		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	UCB	SC	WOSCHNAGG, KURT	UCB	Maintain and Verify Simulation of Photon Propagation and update Ice Properties						0.50	0.50		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	UD	PO	GONZALEZ, JAVIER	UD	Simulations						0.10	0.10		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	UD	GR	RUZYBAEV, BAKHTIYAR	UD	Ice Properties Simulation						0.30	0.30		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	UD	GR	UD GR	UD	Simulation Programs: sim-services						0.30	0.30		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	UMD	PO	OLIVAS, ALEX	UMD	Simulation Software Programs coordinator						0.40	0.40		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	UMD	PO	WISSING, HENRIKE	UMD	Maintain Detector Simulation (IceSim)						0.13	0.13		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	UMD	GR	REDL, PETER	UMD	Maintain Detector Simulation (IceSim)						0.25	0.25		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	UW	SC	CHIRKIN, DMITRY	UW	Maintain and Verify Simulation of Photon Propagation and update Ice Properties						0.35	0.35		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	UW	SC	HOSHINA, KOTOYO	UW	nugen maintenance						0.25	0.25		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	UW	PO	KOPPER, CLAUDIO	UW	Direct photon propagation, IceTray, Simulations, Genie						0.25	0.25		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	UW	GR	RIEDEL, BENEDICT	UW	Supernova DAQ simulation						0.20	0.20		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	UW	TE	DIAZ-VELEZ, JUAN CARLOS	UW	Maintain Simulation Production Software						0.20	0.20		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	<b>US Total</b>									<b>1.70</b>	<b>2.18</b>	<b>0.30</b>	<b>4.18</b>	
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	DTMND	GR	MILKE, NATALIE	DTMND	Simulation Programs: noise-generator						0.20	0.20		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	SU	KE	HULTQVIST, KLAS	SU	Simulation Work						0.10	0.10		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	SU	GR	FLIS, SAMUEL	SU	DOM simulation						0.15	0.15		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	UOX	KE	SARKAR, SUBIR	UOX	Yellow Book-maintenance						0.10	0.10		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	GENT	SC	UGENT SC	GENT	Support IceTop Simulations, IceTop Calibrations, IceTop Reconstruction						0.10	0.10		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	GENT	GR	UGENT GR	GENT	Support IceTop Simulations, IceTop Calibrations, IceTop Reconstruction						0.40	0.40		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	BOCHUM	KE	TJUS, JULIA	BOCHUM	Development PROPOSAL simulation software						0.10	0.10		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	BOCHUM	GR	SCHÖNEBERG, SEBASTIAN	BOCHUM	Monte Carlo Production						0.10	0.10		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	BOCHUM	GR	OLIVO, MARTINO	BOCHUM	Monte Carlo Validation						0.10	0.10		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	RWTH	GR	BLUMENTHAL, JAN	RWTH	Photonics Production						0.10	0.10		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	RWTH	GR	LEIF RADEL	RWTH	Implementation of new light yield factors in IceCube software						0.10	0.10		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	RWTH	GR	SEBASTIAN SCHÖNEN	RWTH	Data driven Simulation tools for magnetic monopoles						0.10	0.10		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	EPFL	KE	RIBORDY, MATHIEU	EPFL	Supernova detector (extension) responses						0.20	0.20		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	EPFL	PO	BRUIJN, RONALD	EPFL	Supernova detector (extension) responses						0.30	0.30		
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	<b>Non-US Total</b>												<b>2.15</b>	<b>2.15</b>
2.5 Data Quality, Reconstruct	2.5.1 Simulation Programs	<b>2.5.1 Simulation Programs</b>									<b>1.70</b>	<b>2.18</b>	<b>0.30</b>	<b>2.15</b>	<b>6.33</b>
2.5 Data Quality, Reconstruct	2.5.2 Reconstruction/ Analysis Tools	LBNL	GR	MIARECKI, SANDRA	LBNL	Algorithm for measuring muon energy						0.30	0.30		
2.5 Data Quality, Reconstruct	2.5.2 Reconstruction/ Analysis Tools	LBNL	GR	BINDER, GARY	LBNL	Cascade reconstruction algorithm						0.20	0.20		
2.5 Data Quality, Reconstruct	2.5.2 Reconstruction/ Analysis Tools	PSU	PO	KOSKINEN, JASON	PSU	Integrating the GENIE Monte Carlo software into IceCube software						0.20	0.10		
2.5 Data Quality, Reconstruct	2.5.2 Reconstruction/ Analysis Tools	PSU	PO	KOSKINEN, JASON	PSU	Coordinate reconstruction scripts for production						0.10	0.10		
2.5 Data Quality, Reconstruct	2.5.2 Reconstruction/ Analysis Tools	PSU	PO	TESIC, GORDANA	PSU	Integrate IceCube into AMON						0.50	0.50		
2.5 Data Quality, Reconstruct	2.5.2 Reconstruction/ Analysis Tools	PSU	GR	DUNKMAN, MATT	PSU	develop starting track reconstruction - hybrid reco.						0.50	0.47		
2.5 Data Quality, Reconstruct	2.5.2 Reconstruction/ Analysis Tools	SUBR	KE	FAZELY, ALI	SUBR	Reconstruction/ Analysis tools						0.15	0.15		
2.5 Data Quality, Reconstruct	2.5.2 Reconstruction/ Analysis Tools	SUBR	SC	XIANWU, XU	SUBR	Reconstruction/ Analysis tools						0.15	0.15		
2.5 Data Quality, Reconstruct	2.5.2 Reconstruction/ Analysis Tools	UA	KE	TOALE, PATRICK	UA	Double cascade fitter						0.10	0.10		
2.5 Data Quality, Reconstruct	2.5.2 Reconstruction/ Analysis Tools	UA	GR	XU, DONGLIAN	UA	Improvements to low energy analysis framework						0.10	0.10		

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		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, Reconstr	2.5.2 Reconstruction/ Analysis Tools	UA	GR	UA PO		Extension of GENIE to higher energies, GENIE/nugen comparison		0.10				0.10		
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	UA	GR	UA PO		Hybrid reconstruction tools		0.20				0.20		
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	UD	PO	GONZALEZ, JAVIER		Event reconstruction		0.25				0.25		
2.5 Data Quality, Reconstr	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, Reconstr	2.5.2 Reconstruction/ Analysis Tools	UMD	PO	WISSING, HENRIKE		develop & test reconstruction		0.13				0.13		
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	UMD	GR	REDL, PETER		Reconstruction/ Analysis tools		0.25				0.25		
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	StonyBrook	PO	LESIAK-BZDAK, MARIOLA		Flashers and Standard Candle				0.10		0.10		
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	StonyBrook	PO	LESIAK-BZDAK, MARIOLA		BadDomList software maintenance				0.10		0.10		
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	StonyBrook	GR	NIEDERHAUSEN, HANS		Standard Candle		0.10				0.10		
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	StonyBrook	GR	NIEDERHAUSEN, HANS		Cascade reconstruction		0.10				0.10		
2.5 Data Quality, Reconstr	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, Reconstr	2.5.2 Reconstruction/ Analysis Tools	UW	PO	AUFFENBERG, JAN		Energy Reconstruction		0.15				0.15		
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	UW	GR	GLADSTONE, LAURA		Reconstruction tools-Deep Core		0.15				0.15		
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	UW	GR	FEINTZIG, JACOB		Event reconstruction (spline fits)		0.15				0.15		
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	UW	GR	VAN SANTEN, JACOB		Cascades		0.30				0.30		
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	UW	PO	WHITEHORN, NATHAN		Event Reconstruction		0.30				0.30		
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	UWRF	KE	MADSEN, JIM		Cosmic ray shower simulations and reconstruction				0.10		0.10		
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	UWRF	KE	SEUNARINE, SURUJ		Low-Energy Extensions of IceTop		0.10				0.10		
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	<b>US Total</b>								<b>0.00</b>	<b>3.98</b>	<b>1.40</b>	<b>5.38</b>	
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	ADELAIDE	KE	HILL, GARY		Event energy and direction reconstruction, millipede					0.40	0.40		
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	ADELAIDE	GR	AARTSEN, MARK		Event energy and direction reconstruction, millipede					0.50	0.50		
2.5 Data Quality, Reconstr	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, Reconstr	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, Reconstr	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, Reconstr	2.5.2 Reconstruction/ Analysis Tools	DESY	GR	SCHÖNWALD, ARNE		Cascade Reconstruction					0.10	0.10		
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	UU	SC	BOERSMA, DAVID		Reconstruction Coordinator					0.20	0.20		
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	RWTH	GR	VEHRING, MARKUS		Finite track reconstruction		0.10				0.10		
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	RWTH	GR	VEHRING, MARKUS		Genie MC development					0.20	0.20		
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	RWTH	GR	WALLRAFF, MARIUS		Oscillation Propagation tool for neutrino oscillations in Earth		0.10				0.10		
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	SU	GR	FLIS, SAMUEL		Energy Reconstruction					0.10	0.10		
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	SU	GR	WOLF, MARTIN		Truncated Mean, EventViewer, cluster tool					0.20	0.20		
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	VUB	KE	VAN EIJDHOVEN, NICK		development of reconstruction tools (IcePack framework)					0.25	0.25		
2.5 Data Quality, Reconstr	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, Reconstr	2.5.2 Reconstruction/ Analysis Tools	VUB	PO	LABARE, MATHIEU		muon track reconstruction in IceCube and DeepCore		0.13			0.13	0.13		
2.5 Data Quality, Reconstr	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, Reconstr	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, Reconstr	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, Reconstr	2.5.2 Reconstruction/ Analysis Tools	ALBERTA	KE	GRANT, DARREN		Maintenance of IceCube-Photonics interface					0.10	0.10		
2.5 Data Quality, Reconstr	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, Reconstr	2.5.2 Reconstruction/ Analysis Tools	MAINZ	GR	SCHATTO, KAI		PPC based tables Muon reconstruction					0.10	0.10		

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		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, Reconstr	2.5.2 Reconstruction/ Analysis Tools	MAINZ	GR	WIEBE, KLAUS		Angular res. Cascades						0.20	0.20	
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	HUMBOLDT	KE	KOLANOSKI, HERMANN		Reconstruction/ Analysis tools						0.10	0.10	
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	HUMBOLDT	GR	ALTMANN, DAVID		Improving the track reconstruction.						0.15	0.15	
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	BONN	GR	UBONN GR		Reconstruction/ Analysis tools						0.20	0.20	
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	BONN	GR	PANKNIN, SEBASTIAN		IC-40 L3 processing						0.20	0.20	
2.5 Data Quality, Reconstr	2.5.2 Reconstruction/ Analysis Tools	<b>Non-US Total</b>										<b>5.93</b>	<b>5.93</b>	
2.5 Data Quality, Reconstr	<b>2.5.2 Reconstruction/ Analysis Tools</b>							<b>0.00</b>	<b>3.98</b>	<b>1.40</b>	<b>5.93</b>	<b>11.30</b>	<b>11.30</b>	
2.5 Data Quality, Reconstr	2.5.3 Data Quality	<b>US Total</b>						<b>#REF!</b>	<b>#REF!</b>	<b>#REF!</b>		<b>0.60</b>	<b>#REF!</b>	
2.5 Data Quality, Reconstr	2.5.3 Data Quality	Munchen	PO	MPI PO		Data Quality & DeepCore						0.60	0.60	
2.5 Data Quality, Reconstr	2.5.3 Data Quality	DPNC	GR	ASEN, CHRISTOV		Data and Simulation Quality						0.20	0.20	
2.5 Data Quality, Reconstr	2.5.3 Data Quality	DPNC	GR	RAAMEZ MOHAMED		Data and Simulation Quality						0.20	0.20	
2.5 Data Quality, Reconstr	2.5.3 Data Quality	DPNC	PO	AGUILAR SANCHEZ JUAN A		Data and Simulation Quality						0.20	0.20	
2.5 Data Quality, Reconstr	2.5.3 Data Quality	VUB	KE	VAN EIJNDHOVEN, NICK		data quality verification						0.25	0.25	
2.5 Data Quality, Reconstr	2.5.3 Data Quality	VUB	PO	GOLUP, GERALDINA		GRB analysis						0.25	0.25	
2.5 Data Quality, Reconstr	2.5.3 Data Quality	VUB	PO	BOSE, DEBANJAN		verification Deep Core data quality						0.25	0.25	
2.5 Data Quality, Reconstr	2.5.3 Data Quality	VUB	PO	LABARE, MATHIEU		verification Deep Core data quality						0.13	0.13	
2.5 Data Quality, Reconstr	2.5.3 Data Quality	VUB	PO	MILLER, JONATHAN		WIMP analysis						0.38	0.38	
2.5 Data Quality, Reconstr	2.5.3 Data Quality	<b>Non-US Total</b>										<b>2.45</b>	<b>2.45</b>	
2.5 Data Quality, Reconstr	<b>2.5.3 Data Quality</b>							<b>#REF!</b>	<b>#REF!</b>	<b>#REF!</b>		<b>2.45</b>	<b>#REF!</b>	
2.5 Data Quality, Reconstr	2.5.4 Offline Data Processing	UW	PO	AUFFENBERG, JAN		Offline Data Processing - EHE						0.15	0.15	
2.5 Data Quality, Reconstr	2.5.4 Offline Data Processing	UW	PO	KOPPER, CLAUDIO		L2 processing support						0.30	0.30	
2.5 Data Quality, Reconstr	2.5.4 Offline Data Processing	UW	PO	NEILSON, NAKO		L2 Offline Processing						0.30	0.30	
2.5 Data Quality, Reconstr	2.5.4 Offline Data Processing	UW	GR	FEINTZIG, JACOB		L2 processing, muon stream						0.20	0.20	
2.5 Data Quality, Reconstr	2.5.4 Offline Data Processing	<b>US Total</b>						<b>0.60</b>	<b>0.35</b>	<b>0.00</b>		<b>0.95</b>	<b>0.95</b>	
2.5 Data Quality, Reconstr	2.5.4 Offline Data Processing	<b>Non-US Total</b>										<b>0.00</b>	<b>0.00</b>	
2.5 Data Quality, Reconstr	<b>2.5.4 Offline Data Processing</b>							<b>0.60</b>	<b>0.35</b>	<b>0.00</b>	<b>0.00</b>	<b>0.95</b>	<b>0.95</b>	
<b>2.5 Data Quality, Recons WBS L2 Total</b>								<b>#REF!</b>	<b>#REF!</b>	<b>#REF!</b>		<b>10.53</b>	<b>#REF!</b>	
<b>Grand Total</b>								<b>#REF!</b>	<b>#REF!</b>	<b>#REF!</b>		<b>31.90</b>	<b>###</b>	