

## IceCube M&O Staffing Matrix sort by Institutions v8.2 2010.0430.xls

Institution	Labor Cat.	Names		WBS L3		Tasks		Funds Source		WBS 2.1 Program Management	WBS 2.2 Detector Maintenance & Operations	WBS 2.3 Computing & Data Management	WBS 2.4 Triggering & Filtering	WBS 2.5 Data Quality, Reconstruction & Simulation Tools	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											
CAU	KE	Japaridze, George	Detector Monitoring	Monitoring shifts		US Institutional Support			0.02					0.02		
		Japaridze, George Total							0.02					0.02		
<b>CAU Total</b>											<b>0.02</b>				<b>0.02</b>	
GTECH	GR	GTECH GR	Detector Monitoring	Monitoring shifts		US Base Grants			0.03					0.03		
		GTECH GR Total							0.03					0.03		
		Daughhete, Jacob	Detector Calibration	Standard Candle Vertex and Energy Calibration		US Base Grants			0.20					0.20		
	Daughhete, Jacob Total							0.20						0.20		
	KE	TABOADA, IGNACIO	Administration	Chair of speakers' committee		US Institutional Support			0.25					0.25		
		TABOADA, IGNACIO Total							0.25		0.00			0.25		
PO	Tepe, Andreas	Simulation Production	Simulation Production		US Base Grants					0.20			0.20			
	Tepe, Andreas Total									0.20			0.20			
<b>GTECH Total</b>											<b>0.25</b>	<b>0.23</b>	<b>0.20</b>	<b>0.00</b>	<b>0.68</b>	
KU	KE	Besson, Dave	Detector Monitoring	Monitoring shifts		US Institutional Support			0.02					0.02		
			Engineering and R&D Su	EMI - Radio R&D		US Institutional Support			0.10					0.10		
		Besson, Dave Total							0.10	0.02				0.12		
<b>KU Total</b>											<b>0.10</b>	<b>0.02</b>			<b>0.12</b>	
LBNL	CS	BEATTIE,KEITH S	Data Acquisition	Maintain DAQ Software Systems (incl. triggers, DOM SW, etc. up to Event Builder)		NSF M&O Core			0.25					0.25		
		BEATTIE,KEITH S Total							0.25					0.25		
		EN	STEZELBERGER,THORST	Data Acquisition	Maintain DAQ Hardware (Hubs, DOR, Clocks, GPS,...)		NSF M&O Core			0.15					0.15	
	STEZELBERGER,THORSTEN Total							0.15					0.15			
	KE		KLEIN,SPENCER	Administration	Supervise LBNL effort		NSF M&O Core			0.05					0.05	
				Publications Comm. Member			US Institutional Support			0.10				0.10		
		Physics Filters		Co. Chair of Cascade WG		US Institutional Support					0.25			0.25		
			Reconstruction/ Analysis	co-chair of Diffuse WG		US Institutional Support						0.25		0.25		
	KLEIN,SPENCER Total							0.15		0.25		0.25	0.65			
	NYGREN,DAVID R	DETECTOR OPERATIO	Track Engine Trigger		US Institutional Support			0.10						0.10		
		NYGREN,DAVID R Total							0.10					0.10		
	PO	BUTIN,STIJN	Simulation Programs	DOM simulator & calibrator		US Base Grants							0.35	0.35		
			BUTIN,STIJN Total										0.35	0.35		
		GERHARDT,LISA	Simulation Programs	Simulation Programs: cmc		US Base Grants							0.20	0.20		
GERHARDT,LISA Total											0.20	0.20				
LBNL PO Total		Detector Monitoring	Monitoring shifts		US Base Grants				0.09	0.00			0.09			
SC	KIRYLUK,JOANNA	Detector Calibration	Flasher Runs		US Base Grants			0.10					0.10			
		Detector Monitoring	BadDomList		US Base Grants			0.20					0.20			
		Simulation Production	Simulation Production on PDSF		US Base Grants					0.20			0.20			
KIRYLUK,JOANNA Total								0.30	0.20			0.50				
<b>LBNL Total</b>											<b>0.15</b>	<b>0.89</b>	<b>0.20</b>	<b>0.25</b>	<b>0.80</b>	<b>2.29</b>
OSU	GR	Davis, James	Detector Monitoring	Monitoring shifts		US Base Grants			0.01					0.01		
			Physics Filters	Vertical Events Filter		US Base Grants						0.15		0.15		
		Davis, James Total							0.01			0.15		0.16		
	PO	OSU PO	Detector Monitoring	Monitoring shifts		US Base Grants			0.02					0.02		
			Education & Outreach	Outreach		US Base Grants			0.05					0.05		
		OSU PO Total							0.05	0.02				0.07		
		ROTT, CARSTEN	Data Quality	Data Quality		US Base Grants							0.10	0.10		
Detector Monitoring	Maintain good run list		US Base Grants					0.20				0.20				
ROTT, CARSTEN Total								0.20			0.10	0.30				
<b>OSU Total</b>											<b>0.05</b>	<b>0.23</b>	<b>0.15</b>	<b>0.10</b>	<b>0.53</b>	
PSU	GR	PSU GR	Detector Monitoring	Monitoring shifts		US Base Grants			0.03					0.03		
		PSU GR Total							0.03					0.03		
		HA, CHANG Hyon	Reconstruction/ Analysis	develop starting track reconstruction		US Base Grants							0.13	0.13		
	HA, CHANG Hyon Total											0.13	0.13			
	KE	COWEN, DOUG	Administration	ExecCom member		US Institutional Support			0.20					0.20		
			Education & Outreach	Education & Outreach		US Institutional Support			0.05					0.05		
			Physics Filters	Tau WG Chair		US Institutional Support						0.25		0.25		
				TFT Coordination	TFT Board member		US Institutional Support						0.10	0.10		
		COWEN, DOUG Total							0.25			0.35		0.60		
	DEYOUNG, TYCE	Education & Outreach	Education & Outreach		US Institutional Support			0.05						0.05		
		Physics Filters	Deep Core WG - Co Chair		US Institutional Support						0.25			0.25		
	DEYOUNG, TYCE Total							0.05			0.25			0.30		
	PO	KOSKINEN, JASON	Physics Filters	develop and verify Deep Core filters		US Base Grants						0.18		0.18		
			Reconstruction/ Analysis	Coordinate Deep Core reconstruction for production		US Base Grants							0.12	0.12		
		KOSKINEN, JASON Total										0.18	0.12	0.30		
		LAFEBRE, SVEN	Detector Monitoring	Monitoring shifts		US Base Grants			0.03					0.03		
			Reconstruction/ Analysis	develop starting track reconstruction		US Base Grants							0.19		0.19	
LAFEBRE, SVEN Total								0.03			0.19	0.22				
PSU PO		Computing Resources	Coordination and Support for Grid and distributed computing		NSF M&O Core					0.25				0.25		
	Simulation Production	Simulation Production		US Base Grants						0.17			0.17			
PSU PO Total									0.42				0.42			
TOALE, PATRICK	Administration	Software Coordinator		MRE Pre Operations			0.75						0.75			
	Simulation Programs	maintain tau simulation tools		US Base Grants								0.10	0.10			
TOALE, PATRICK Total							0.75	0.00				0.10	0.85			
<b>PSU Total</b>											<b>1.05</b>	<b>0.06</b>	<b>0.42</b>	<b>0.78</b>	<b>0.53</b>	<b>2.83</b>

## IceCube M&O Staffing Matrix sort by Institutions v8.2 2010.0430.xls

Institution	Labor Cat.	Names		WBS L3		Tasks		Funds Source		WBS 2.1 Program Management	WBS 2.2 Detector Maintenance & Operations	WBS 2.3 Computing & Data Management	WBS 2.4 Triggering & Filtering	WBS 2.5 Data Quality, Reconstruction & Simulation Tools	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										
SUBR	KE	FAZELY, ALI		Reconstruction/ Analysis		Reconstruction/ Analysis tools		US Institutional Support						0.15	0.15
				Simulation Programs		GEANT Simulation		US Institutional Support						0.15	0.15
		FAZELY, ALI Total												0.30	0.30
		Imlay, Richard		Reconstruction/ Analysis		Reconstruction/ Analysis tools		US Institutional Support						0.15	0.15
				Simulation Programs		Simulation Programs		US Institutional Support						0.15	0.15
	Imlay, Richard Total												0.30	0.30	
	SC	TER-ANTONYAN, SAMVH		Computing Resources		LONI Grid computing		US Institutional Support				0.30			0.30
				Detector Monitoring		Detector Monitoring		US Institutional Support			0.02				0.02
		TER-ANTONYAN, SAMVEL Total									0.02	0.30			0.32
	<b>SUBR Total</b>											<b>0.02</b>	<b>0.30</b>		<b>0.60</b>
UA	GR	Xu, Donglian		Detector Calibration		geometry systematic		US Base Grants			0.25				0.25
				Detector Monitoring		Monitoring shifts		US Base Grants			0.03				0.03
		Xu, Donglian Total									0.28				0.28
	KE	Williams, Dawn		Data Quality		Data Quality Lead		US Institutional Support						0.15	0.15
				Detector Calibration		managing flasher runs and other calibrations (stage 2 geometry)		US Institutional Support			0.15				0.15
		Williams, Dawn Total									0.15			0.15	0.30
	PO	Zarzhitzky, Pavel		Detector Calibration		taking flasher runs		US Base Grants			0.20				0.20
				Simulation Programs		Simulation verification		US Base Grants						0.30	0.30
	Zarzhitzky, Pavel Total									0.20				0.30	0.50
	<b>UA Total</b>											<b>0.63</b>		<b>0.45</b>	<b>1.08</b>
UAA	KE	Rawlins, Katherine		Detector Monitoring		Monitoring shifts		US Institutional Support			0.02				0.02
				Simulation Programs		SPASE / IceTop simulation; flat n-tuple		US Institutional Support						0.40	0.40
		Rawlins, Katherine Total									0.02			0.40	0.42
<b>UAA Total</b>											<b>0.02</b>		<b>0.40</b>	<b>0.42</b>	
UCB	GR	UCB GR		Detector Calibration		Calibration		US Base Grants			0.10				0.10
				Detector Monitoring		Monitoring shifts		US Base Grants			0.02				0.02
		UCB GR Total									0.12				0.12
	KE	PRICE, BUFORD		Administration		Education & Outreach		US Institutional Support		0.10					0.10
		PRICE, BUFORD Total								0.10					0.10
	SC	FILIMONOV, KIRILL		Detector Monitoring		Coordinate Monitoring		US Base Grants			0.50				0.50
		FILIMONOV, KIRILL Total									0.50				0.50
		UCB SC		Detector Monitoring		Monitoring shifts		US Base Grants			0.02				0.02
		UCB SC Total									0.02				0.02
		WOSCHNAGG, KURT		Administration		Speakers Comm member		US Base Grants		0.10					0.10
			Detector Calibration		Calibration Lead		US Base Grants			0.15				0.15	
			Physics Filters		Diffuse / atmosnu WG chair		US Base Grants					0.25		0.25	
			Simulation Programs		Maintain and Verify Simulation of Photon Propagation and update Ice Properties		NSF M&O Core						0.50	0.50	
WOSCHNAGG, KURT Total								0.10	0.15		0.25	0.50	1.00		
<b>UCB Total</b>										<b>0.20</b>	<b>0.78</b>		<b>0.25</b>	<b>0.50</b>	<b>1.73</b>
UCI	GR	Hanson, Jordan		Detector Monitoring		Monitoring shifts		US Base Grants			0.01				0.01
		Hanson, Jordan Total									0.01				0.01
	PO	Silverstri, Andrea		Detector Monitoring		Monitoring shifts		US Base Grants			0.01				0.01
		Silverstri, Andrea Total									0.01				0.01
<b>UCI Total</b>											<b>0.02</b>			<b>0.02</b>	
UD	GR	Ruzybaev, Bakhtiyar		Simulation Programs		Ice Properties Simulation		US Base Grants						0.30	0.30
		Ruzybaev, Bakhtiyar Total												0.30	0.30
		Xu, Chen		Simulation Programs		Simulation Programs: sim-services		US Base Grants						0.30	0.30
		Xu, Chen Total												0.30	0.30
	KE	GAISSER, TOM		Administration		Spokesperson		US Institutional Support		0.30					0.30
		GAISSER, TOM Total								0.30					0.30
		SECKEL, DAVID		TFT Coordination		TFT Board member		US Institutional Support					0.10		0.10
		SECKEL, DAVID Total											0.10		0.10
	UD KE			Data Acquisition		DAQ Monitoring		US Institutional Support			0.05				0.05
		UD KE Total									0.05				0.05
	PO	BERGHAUS, PATRICK - U		Physics Filters		moun channel WG Co. Chair		US Base Grants						0.25	0.25
		BERGHAUS, PATRICK - UD Total												0.25	0.25
		Hussain, Shahid		Simulation Production		IceTop Simulation Production		US Base Grants				0.15			0.15
				Simulation Programs		Ice Properties Simulation		US Base Grants						0.30	0.30
		Hussain, Shahid Total										0.15		0.30	0.45
		Kuwabara, Takao		Detector Monitoring		Temp. & Pressure atmospheric monitoring		US Base Grants			0.25				0.25
	Kuwabara, Takao Total									0.25				0.25	
SC	UD SC		IceTop Operations		Coordinate IceTop Operations		NSF M&O Core			1.00				1.00	
	UD SC Total									1.00				1.00	
<b>UD Total</b>										<b>0.30</b>	<b>1.30</b>	<b>0.15</b>	<b>0.35</b>	<b>0.90</b>	<b>3.00</b>
UMD	CS	UMD CS		Core Software		Maintain Core Software Repository		NSF M&O Core			0.25				0.25
		UMD CS Total									0.25				0.25
	GR	CHRISTY, BRIAN		Simulation Production		Simulation Production coordination		US Base Grants				0.25			0.25
		CHRISTY, BRIAN Total										0.25			0.25
		Ehrlich, Ralf		Core Software		Core Software		US Base Grants					0.50		0.50
		Ehrlich, Ralf Total										0.50			0.50
		REDL, PETER		Online Filter (PnF)		Online Filter Testing		US Base Grants			0.25				0.25
				Reconstruction/ Analysis		Reconstruction/ Analysis tools		US Base Grants						0.25	0.25
				Simulation Programs		Maintain Detector Simulation (IceSim)		US Base Grants						0.25	0.25
		REDL, PETER Total									0.25			0.50	0.75

## IceCube M&O Staffing Matrix sort by Institutions v8.2 2010.0430.xls

Institution	Labor Cat.	Names		WBS L3		Tasks		Funds Source		WBS 2.1 Program Management	WBS 2.2 Detector Maintenance & Operations	WBS 2.3 Computing & Data Management	WBS 2.4 Triggering & Filtering	WBS 2.5 Data Quality, Reconstruction & Simulation Tools	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											
UMD	GR	Core Software	Core Software	US Base Grants			0.25							0.25		
		Detector Monitoring	Monitoring shifts	US Base Grants			0.06							0.06		
		TFT Coordination	Prepare datasets for filter testing and common MC datasets for testing	US Base Grants					0.20						0.20	
	<b>UMD GR Total</b>							<b>0.06</b>	<b>0.25</b>	<b>0.20</b>					<b>0.51</b>	
	KE	HOFFMAN, KARA	Engineering and R&D Su	Detector R&D	US Institutional Support			0.20							0.20	
		<b>HOFFMAN, KARA Total</b>						<b>0.20</b>							<b>0.20</b>	
		Sullivan, Greg	Administration	ExecCom member	US Institutional Support			0.20							0.20	
		<b>Sullivan, Greg Total</b>							<b>0.20</b>							<b>0.20</b>
		UMD KE	Education & Outreach	E&O	US Institutional Support			0.10							0.10	
	<b>UMD KE Total</b>							<b>0.10</b>							<b>0.10</b>	
	PO	OLIVAS, ALEX	Administration	Pubcom member	US Base Grants			0.10							0.10	
			Physics Filters	exotics- WG chair	US Base Grants					0.25					0.25	
			Simulation Programs	Simulation Software Programs coordinator	NSF M&O Core										0.40	
		<b>OLIVAS, ALEX Total</b>							<b>0.10</b>		<b>0.25</b>			<b>0.40</b>	<b>0.75</b>	
		UMD PO	Detector Monitoring	Monitoring shifts	US Base Grants				0.03						0.03	
		<b>UMD PO Total</b>							<b>0.03</b>						<b>0.03</b>	
		Wissing, Henrike	Administration	Pubcom member	US Base Grants				0.10							0.10
			Reconstruction/ Analysis	develop & test reconstruction	US Base Grants										0.25	0.25
			Simulation Programs	Maintain Detector Simulation (IceSim)	US Base Grants										0.25	0.25
		<b>Wissing, Henrike Total</b>							<b>0.10</b>						<b>0.50</b>	<b>0.60</b>
	SC	BLAUFUSS, ERIK	Online Filter (PnF)	Maintain PnF Software and Online Filters	NSF M&O Core				0.20						0.20	
			Physics Filters	GRB WG Chair	US Base Grants						0.25				0.25	
			TFT Coordination	Coordinate process for filter requests, bandwidth	NSF M&O Core							0.30			0.30	
		<b>BLAUFUSS, ERIK Total</b>							<b>0.20</b>	<b>0.00</b>	<b>0.55</b>				<b>0.75</b>	
SCHMIDT, TORSTEN	Core Software	Maintain Core Analysis Framework (IceTray)	NSF M&O Core						0.50				0.50			
	Online Filter (PnF)	Maintain PnF Software and Online Filters	NSF M&O Core					0.25					0.25			
<b>SCHMIDT, TORSTEN Total</b>								<b>0.25</b>	<b>0.50</b>					<b>0.75</b>		
TE	STRASZHEIM, TROY	Core Software	> 1 FTE	NSF M&O Core												
			Maintain Core Analysis Framework (IceTray)	NSF M&O Core					0.88					0.88		
	<b>STRASZHEIM, TROY Total</b>									<b>0.88</b>				<b>0.88</b>		
UMD TE	Computing Resources	Coordination and Support for Grid and distributed computing	NSF M&O Core										0.25	0.25		
<b>UMD TE Total</b>													<b>0.25</b>	<b>0.25</b>		
<b>UMD Total</b>										<b>0.70</b>	<b>0.79</b>	<b>2.88</b>	<b>1.00</b>	<b>1.40</b>	<b>6.77</b>	
UW	AD	MALKUS, EVELYN	Education & Outreach	Education & Outreach Coordination	NSF M&O Core			0.75						0.75		
		<b>MALKUS, EVELYN Total</b>							<b>0.75</b>						<b>0.75</b>	
		RICHARDS, JOHN	Data Storage & Transfer	Maintain and Operate Data Storage Infrastructure	NSF M&O Core						1.00				1.00	
	<b>RICHARDS, JOHN Total</b>									<b>1.00</b>				<b>1.00</b>		
	UW AD	Administration	Administrative Support	NSF M&O Core				0.50							0.50	
			Host Spring collaboration meeting	US Institutional Support				0.50							0.50	
		Education & Outreach	Teachers	NSF M&O Core				0.25							0.25	
	<b>UW AD Total</b>							<b>1.25</b>							<b>1.25</b>	
	CS	JACOBSEN, JOHN (NPX)	Data Acquisition	Maintain DAQ Hardware (Hubs, DOR, Clocks, GPS,...)	NSF M&O Core					0.15					0.15	
			Experiment Control	IceCube Live Maintenance and Upgrades	NSF M&O Core					0.85					0.85	
		<b>JACOBSEN, JOHN (NPX) Total</b>								<b>1.00</b>					<b>1.00</b>	
		SOUNDARAPANDIAN, K	SPS Operations	Maintain South Pole Computing Hardware Infrastructure and operating systems	NSF M&O Core					0.75						0.75
	SPTS Operations		Maintain South Pole Test System Hardware and Operating Systems	NSF M&O Core					0.25						0.25	
	<b>SOUNDARAPANDIAN, KARTHIK Total</b>								<b>1.00</b>						<b>1.00</b>	
	EN	BARNET, STEVE	Computing Resources	0.75 Maintain Core High Performance Computing Systems 0.25 Coordination and Support for Grid and distributed computing	NSF M&O Core								1.00		1.00	
			<b>BARNET, STEVE Total</b>											<b>1.00</b>		<b>1.00</b>
		BOGEN, DAVID	Computing Resources	Maintain Data Center Infrastructure	NSF M&O Core								1.00		1.00	
		<b>BOGEN, DAVID Total</b>												<b>1.00</b>		<b>1.00</b>
		MACKENZIE, CYNTHIA	Data Storage & Transfer	Transfer Data from S. Pole to UW Data Warehouse and Archive at S. Pole Maintain Data Transfer Software (SPADE) Maintain Data Warehouse Standards, Software (Ingest), Data Access (FTP), and Web Interface	NSF M&O Core									0.50		0.50
			<b>MACKENZIE, CYNTHIA Total</b>											<b>0.50</b>		<b>0.50</b>
		UW EN	Engineering and R&D Su	Engineering Support	NSF M&O Core				0.10							0.10
			SPTS Operations	Maintain South Pole Test System Hardware and Operating Systems	NSF M&O Core					0.50						0.50
		<b>UW EN Total</b>							<b>0.10</b>	<b>0.50</b>						<b>0.60</b>
		WISNIEWSKI, PAUL	Computing Resources	Maintain Data Center Networking and Security	NSF M&O Core									0.75		0.75
SPS Operations	Networking and Security Maintenance		NSF M&O Core						0.25					0.25		
<b>WISNIEWSKI, PAUL Total</b>								<b>0.25</b>	<b>0.75</b>					<b>1.00</b>		

## IceCube M&O Staffing Matrix sort by Institutions v8.2 2010.0430.xls

Institution	Labor Cat.	Names		WBS L3		Tasks		Funds Source		WBS 2.1 Program Management	WBS 2.2 Detector Maintenance & Operations	WBS 2.3 Computing & Data Management	WBS 2.4 Triggering & Filtering	WBS 2.5 Data Quality, Reconstruction & Simulation Tools	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											
GR	BAKER, MICHAEL	Detector Monitoring	Stability	US Base Grants				0.10							0.10	
	BAKER, MICHAEL Total							0.10							0.10	
	DUMM, JONATHAN	Offline Data Processing	Offline Data Processing	US Base Grants										0.15	0.15	
		Reconstruction/ Analysis	Reconstruction Tools	US Base Grants										0.15	0.15	
	DUMM, JONATHAN Total														0.30	0.30
	EISCH, JONATHAN	Simulation Production	IceTop Simulation Production	US Base Grants							0.30				0.30	
	EISCH, JONATHAN Total										0.30				0.30	
	GLADSTONE, LAURA	Detector Calibration	Moon Shadow	US Base Grants							0.15				0.15	
		Physics Filters	Deep Core online Filter	US Base Grants									0.15		0.15	
	GLADSTONE, LAURA Total										0.15		0.15		0.30	
	Rodrigues, Joao-Paulo	Reconstruction/ Analysis	Supernova simulation / moun energy reconstruction	US Institutional Support											0.20	0.20
	Rodrigues, Joao-Paulo Total														0.20	0.20
	Santander, Marcos	Detector Calibration	Calibration with flashers	US Base Grants							0.20				0.20	
		Simulation Programs	Flasher Analysis	US Base Grants										0.15	0.15	
	Santander, Marcos Total										0.20				0.35	
	UW GR	Detector Monitoring	Monitoring shifts	US Base Grants							0.12				0.12	
	UW GR Total										0.12				0.12	
	Weaver, Christopher	Data Acquisition	DOM CAL Maintenance	US Base Grants							0.20				0.20	
	Weaver, Christopher Total										0.20				0.20	
	KE	HALZEN, FRANCIS	Administration	Principle Investigator	NSF M&O Core				0.08						0.08	
				US Institutional Support				0.33						0.33		
HALZEN, FRANCIS Total								0.42					0.42			
KARLE, ALBRECHT		Administration	Associate Director for Science	NSF M&O Core				0.08						0.08		
				US Institutional Support				0.33						0.33		
KARLE, ALBRECHT Total								0.42					0.42			
MONTARULI, TERESA		TFT Coordination	TFT Board member	US Institutional Support									0.10		0.10	
MONTARULI, TERESA Total												0.10		0.10		
WESTERHOFF, STEFAN	Administration	Pubcom member	US Institutional Support				0.10							0.10		
WESTERHOFF, STEFAN Total								0.10						0.10		
MA	LAITSCH, DENISE	DETECTOR OPERATIO	Budget in MRE	NSF M&O Core												
			Detector Operations Manager	NSF M&O Core						0.88				0.88		
	LAITSCH, DENISE Total									0.88				0.88		
	MERCK, MARTIN	Administration	Computing Infrastructure Management	NSF M&O Core				1.00						1.00		
	MERCK, MARTIN Total								1.00					1.00		
	PAULOS, ROBERT	USAP Support	USAP Support	NSF M&O Core				0.25						0.25		
	PAULOS, ROBERT Total								0.25					0.25		
PELES, ADI	Administration	Resource Coordinator	NSF M&O Core				0.50						0.50			
PELES, ADI Total								0.50					0.50			
PO	ABBASI, RASHA	Simulation Programs	DST data checking	US Base Grants									0.10	0.10		
	ABBASI, RASHA Total												0.10	0.10		
	Aguilar Sanchez Juan Antonio	Physics Filters	muon filter	US Base Grants								0.15		0.15		
		Simulation Programs	low level moun data verification (data/mc)	US Base Grants									0.10	0.10		
	Aguilar Sanchez Juan Antonio Total											0.15	0.10	0.25		
	HOSHINA, K	Simulation Production	Photon prop. Calibration	US Base Grants						0.10				0.10		
	HOSHINA, K Total									0.10				0.10		
	Toscano, Simona	Data Production Processor	Cascade data processing	US Base Grants							0.35			0.35		
		Physics Filters	Cascade Online filter	US Base Grants								0.15		0.15		
	Toscano, Simona Total										0.35	0.15		0.50		
UW PO	Detector Monitoring	Monitoring shifts	US Base Grants							0.12				0.12		
	Simulation Programs	Maintain IceSim	US Base Grants										0.40	0.40		
UW PO Total										0.12			0.40	0.52		
SC	CHIRKIN, DMITRY	Reconstruction/ Analysis	Direct photon tracking / iceproperties calibration 0.3 ; FE/pulse extractor 0.1 ; reco software 0.1	US Base Grants										0.30	0.30	
		Simulation Programs	Simulation Programs: mmc/mmc-icetray and ucr-icetray	US Base Grants										0.20	0.20	
	CHIRKIN, DMITRY Total													0.50	0.50	
	DESIATI, PAOLO	Simulation Production	Coordination of Simulation Production	NSF M&O Core								0.70			0.70	
	DESIATI, PAOLO Total											0.70			0.70	
	HANSON, KAEL	Run Coordination	Left UW	NSF M&O Core												
	HANSON, KAEL Total															
	HILL, GARY	Administration	Weekly call, ICC support	US Base Grants				0.20							0.20	
		Offline Data Processing	Offline processing	NSF M&O Core										0.25	0.25	
		Simulation Programs	Maintain and Verify Simulation of Photon Propagation and update Ice Properties	NSF M&O Core										0.25	0.25	
	HILL, GARY Total							0.20						0.50	0.70	
	KRASBERG, MARK	Data Acquisition	DOM Cal Maintenance, DOM Monitoring and Troubleshooting	NSF M&O Core						0.35					0.35	
			Provide Real-time System Monitoring and Paging	NSF M&O Core							0.20				0.20	
		Run Coordination	Winterovers coordinator	NSF M&O Core							0.25				0.25	
	KRASBERG, MARK Total										0.80				0.80	
	LANDSMAN, YAEL HAGAR	Engineering and R&D Su	Science Support	NSF M&O Core				0.25							0.25	
	LANDSMAN, YAEL HAGAR Total								0.25						0.25	
MARUYAMA, REINA	Physics Filters	Supernova WG Chair	US Base Grants									0.25		0.25		
MARUYAMA, REINA Total												0.25		0.25		

## IceCube M&O Staffing Matrix sort by Institutions v8.2 2010.0430.xls

Institution	Labor Cat.	Names		WBS L3		Tasks		Funds Source		WBS 2.1 Program Management	WBS 2.2 Detector Maintenance & Operations	WBS 2.3 Computing & Data Management	WBS 2.4 Triggering & Filtering	WBS 2.5 Data Quality, Reconstruction & Simulation Tools	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										
UW	SE	WENDT, CHRISTOPHER		Data Acquisition	DOM CAL Maintenance		NSF M&O Core			0.25					0.25
				Detector Calibration	Prepare and Evaluate Flasher Calibrations 0.25 Evaluate (DomCal) Calibration Runs and update Calibration constants 0.1		NSF M&O Core			0.28					0.28
		WENDT, CHRISTOPHER Total									0.53				
	GLOWACKI, DAVID		Data Acquisition	Maintain DAQ Software Systems (incl. triggers, DOM SW, etc. up to Event Builder)		NSF M&O Core			1.00						1.00
	GLOWACKI, DAVID Total									1.00					1.00
	LAUNDRIE, ANDREW		Engineering and R&D Support	EMI, Instrumentation, I/F		NSF M&O Core			0.25						0.25
			Engineering Support			NSF M&O Core			0.65						0.65
			SPTS Operations	Maintain South Pole Test System Hardware and Operating Systems		NSF M&O Core			0.10						0.10
	LAUNDRIE, ANDREW Total									0.90	0.10				1.00
	SANDSTROM, PERRY		Data Acquisition	Maintain DAQ Hardware (Hubs, DOR, Clocks, GPS,...)		NSF M&O Core			0.25						0.25
			Engineering and R&D Support	EMI, Instrumentation, I/F		NSF M&O Core			0.25						0.25
			Engineering Support			NSF M&O Core			0.25						0.25
			SPS Operations	Maintain South Pole Computing Hardware Infrastructure and operating systems		NSF M&O Core			0.25						0.25
	SANDSTROM, PERRY Total									0.50	0.50				1.00
	DIAZ-VELEZ, JUAN CARLOS		Core Software	Simulation Programs: dipopia		NSF M&O Core					0.80				0.80
			Simulation Programs	Maintain Simulation Production Software		NSF M&O Core								0.20	0.20
	DIAZ-VELEZ, JUAN CARLOS Total										0.80			0.20	1.00
	FADIRAN, OLADIPO		Core Software	Maintain Data Processing Software		NSF M&O Core					0.20				0.20
			Data Storage & Transfer	Transformation of Data for Long-Term Persistence and Archival, e.g., HDF5 Maintain Data Warehouse Standards, Software (Ingest), Data Access (FTP), and Web Interface		NSF M&O Core					0.20				0.20
			Simulation Production	0.30 Coordination of Simulation Production 0.30 Maintain production configurations, manage test production and maintain web portal.		NSF M&O Core					0.60				0.60
	FADIRAN, OLADIPO Total										1.00				1.00
	MCGUIRE, PAUL		Computing Resources	Maintain Data Center Infrastructure		NSF M&O Core					0.50				0.50
			Data Storage & Transfer	Maintain and Operate Data Storage Infrastructure		NSF M&O Core					0.50				0.50
	MCGUIRE, PAUL Total										1.00				1.00
	MEADE, PATRICK		Data Production Processing	0.2 Unpacking, Decoding and Calibration of Raw Data in the North (Level1) 0.3 Run Common Reconstructions on UW IceCube Compute Cluster (Level2)		NSF M&O Core					0.50				0.50
		Data Storage & Transfer	Transfer Data from S. Pole to UW Data Warehouse and Archive at S. Pole Maintain Data Transfer Software (SPADE) Maintain Data Warehouse Standards, Software (Ingest), Data Access (FTP), and Web Interface		NSF M&O Core					0.50				0.50	
MEADE, PATRICK Total										1.00				1.00	
UW TE		Computing Resources	Maintain Core High Performance Computing Systems		NSF M&O Core					0.44				0.44	
		Core Software	Maintain Data Processing Software		NSF M&O Core					0.30				0.30	
		Data Storage & Transfer	Transformation of Data for Long-Term Persistence and Archival, e.g., HDF5 Maintain Data Warehouse Standards, Software (Ingest), Data Access (FTP), and Web Interface		NSF M&O Core					0.30				0.30	
		Engineering and R&D Support	EMI, Instrumentation, I/F		NSF M&O Core			0.25						0.25	
UW TE Total									0.25	0.00	1.04			1.29	
UW WO		Run Coordination	Operate Detector (Winter-Overs)		NSF M&O Core					3.00				3.00	
UW WO Total										3.00				3.00	
<b>UW Total</b>									<b>6.88</b>	<b>10.44</b>	<b>10.54</b>	<b>0.80</b>	<b>2.45</b>	<b>31.11</b>	
UWRF	KE	MADSEN, JIM		Education & Outreach	Teachers' program and UWRF Upward Bound		US Institutional Support			0.10					0.10
				Reconstruction/ Analysis	Cosmic ray shower simulations and reconstruction		US Institutional Support						0.10		0.10
		MADSEN, JIM Total									0.10			0.10	0.20
	SPICZAK, GLENN		IceTop Operations	IceTop tank Monitoring		US Institutional Support				0.03				0.03	
	SPICZAK, GLENN Total									0.03				0.03	
	SC	Tamburro, Alessio		IceTop Operations	IceTop tank Monitoring		US Institutional Support				0.03				0.03
				Reconstruction/ Analysis	Shower simulations, TankTop simulation		US Institutional Support						0.20		0.20
	Tamburro, Alessio Total									0.03			0.20		0.23
	TE	UWRF TE		Education & Outreach	Teachers Program		US Base Grants			0.15					0.15
		UWRF TE Total									0.15				0.15
<b>UWRF Total</b>									<b>0.25</b>	<b>0.05</b>	<b>14.68</b>	<b>3.58</b>	<b>0.30</b>	<b>0.60</b>	
<b>Grand Total</b>									<b>9.93</b>	<b>15.49</b>	<b>14.68</b>	<b>3.58</b>	<b>8.43</b>	<b>52.11</b>	

## IceCube M&O Staffing Matrix sort by Institutions v8.2 2010.0430.xls

Institution	Labor Cat.	Names		WBS L3		Tasks				WBS 2.1	WBS 2.2	WBS 2.3	WBS 2.4	WBS 2.5	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										
ALBERTA	KE	GRANT, DARREN		Reconstruction/ Analysis t	Maintenance of IceCube-Photonics interface									0.10	0.10		
				Simulation Production	WestGrid computing							0.10				0.10	
		GRANT, DARREN Total										0.10			0.10	0.20	
	PO	ALBERTA, PO		Reconstruction/ Analysis t	Maintenance of IceCube-Photonics interface										0.30	0.30	
ALBERTA, PO Total													0.30	0.30			
<b>ALBERTA Total</b>													<b>0.10</b>	<b>0.00</b>	<b>0.40</b>	<b>0.50</b>	
BARBADO	KE	Seunarine, Suruj		DATA QUALITY, RECO	Analysis of flasher runs for inice calibration of saturation, and flasher and Standard Candle runs for absolute energy calibration for cascades.									0.15	0.15		
				Physics Filters	Work on cascade filter									0.15	0.15		
		Seunarine, Suruj Total													0.15	0.15	
<b>BARBADOS Total</b>													<b>0.15</b>	<b>0.15</b>	<b>0.30</b>		
CHIBA	KE	YOSHIDA, SHIGERU		Physics Filters	EHE WG Lead									0.25	0.25		
		YOSHIDA, SHIGERU Total													0.25	0.25	
		CHIBA KE		Reconstruction/ Analysis t	Maintain Romeo, EHE Simulations										0.20	0.20	
		CHIBA KE Total													0.20	0.20	
	SC	CHIBA SC		Reconstruction/ Analysis t	Maintain Romeo, EHE Simulations, Maintain reconstruction projects (Portia), MC/Data comparison for EHE-filtered and IceTop events, Standard Candle Analysis										0.20	0.20	
		CHIBA SC Total													0.20	0.20	
	GR	ONO, MIO		Physics Filters	EHE Filters										0.15	0.15	
		ONO, MIO Total													0.15	0.15	
		CHIBA GR		Detector Monitoring	Detector Monitoring										0.03	0.03	
				Reconstruction/ Analysis t	Improve the Ice Model, Afterpulse Simulator, Standard Candle Analysis, Maintain reconstruction projects (Ophelia, tehe-star)										0.20	0.20	
<b>CHIBA Total</b>													<b>0.03</b>	<b>0.40</b>	<b>0.60</b>	<b>1.03</b>	
DESY	KE	SPIERING, CHRISTIAN		Administration	ExecCom member									0.15	0.15		
		SPIERING, CHRISTIAN Total													0.15	0.15	
		NAHNHAUER, ROLF		Engineering and R&D Sur	Acoustic R&D Support											0.10	0.10
		NAHNHAUER, ROLF Total														0.10	0.10
		WALTER, MICHAEL		Simulation Production	Simulation Production Cluster											0.20	0.20
		WALTER, MICHAEL Total														0.20	0.20
	SC	BENABDERRAHMANE		Detector Monitoring	Deputy Monitoring Coordinator										0.20	0.20	
		BENABDERRAHMANE, LOFTI Total													0.20	0.20	
		DESY SC		Detector Monitoring	Detector Monitoring											0.06	0.06
		DESY SC Total														0.06	0.06
		SULANKE, K.-H.		Data Acquisition	DAQ Firmware Support											0.15	0.15
		SULANKE, K.-H. Total														0.15	0.15
		BERGMANN, JENS		Simulation Production	Simulation Production Cluster											0.25	0.25
		BERGMANN, JENS Total														0.25	0.25
	GR	FRANKE, ROBERT		Physics Filters	Online Filter for Alerts Rate Data Bank South Pole										0.10	0.10	
		FRANKE, ROBERT Total													0.10	0.10	
		DESY GR		Detector Monitoring	Detector Monitoring											0.12	0.12
				Simulation Production	Simulation Production Cluster											0.15	0.15
		DESY GR Total														0.12	0.27
		MIDDELL, EIKE		Reconstruction/ Analysis t	Cascade Reconstruction											0.30	0.30
		MIDDELL, EIKE Total														0.30	0.30
		ACHIM STOESSL		Detector Calibration	Flasher Analysis											0.20	0.20
ACHIM STOESSL Total														0.20	0.20		
EIKE MIDDELL		Detector Calibration	Flasher Analysis											0.10	0.10		
EIKE MIDDELL Total														0.10	0.10		
TE	KISLAT, FABIAN		Computing Resources	Reconstricoin Coordinator (acting), Maintain Reconstruction Framework										0.15	0.15		
	KISLAT, FABIAN Total													0.15	0.15		
	DESY TE		Computing Resources	European Data Center -Distributed Computing and Labor											2.00	2.00	
	DESY TE Total														2.00	2.00	
<b>DESY Total</b>											<b>0.25</b>	<b>0.83</b>	<b>2.75</b>	<b>0.20</b>	<b>0.30</b>	<b>4.33</b>	
DTMND	SC	PIELOTH, DAMIAN		Computing Resources	Coordinate GRID computing in Germany									0.25	0.25		
		PIELOTH, DAMIAN Total													0.25	0.25	
	GR	DTMD GR		Detector Monitoring	Detector Monitoring										0.03	0.03	
				Simulation Production	Simulation Production										0.40	0.40	
		DTMD GR Total													0.03	0.40	0.43
Milke, Natalie		Simulation Programs	Simulation Programs: noise-generator											0.20	0.20		
Milke, Natalie Total														0.20	0.20		
<b>DTMND Total</b>											<b>0.03</b>	<b>0.65</b>	<b>0.20</b>	<b>0.20</b>	<b>0.88</b>		



## IceCube M&O Staffing Matrix sort by Institutions v8.2 2010.0430.xls

Institution	Labor Cat.	Names		WBS L3		Tasks				WBS 2.1	WBS 2.2	WBS 2.3	WBS 2.4	WBS 2.5	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								
EPFL	KE	EPFL KE		Engineering and R&D Support		Acoustic R&D Support				0.10					0.10
		EPFL KE Total								0.10					0.10
	SC	EPFL SC		Reconstruction/ Analysis tools		SLF, Low Energy, Energy reconstruction (development)								0.25	0.25
		EPFL SC Total									0.00			0.25	0.25
	GR	EPFL GR		Detector Monitoring		Detector Monitoring					0.03				0.03
EPFL GR Total									0.03				0.03		
<b>EPFL Total</b>										<b>0.10</b>	<b>0.03</b>			<b>0.25</b>	<b>0.38</b>
HUMB	SC	HUMB SC		Detector Monitoring		Detector Monitoring					0.03				0.03
		HUMB SC Total												0.10	0.10
	WALDENMAIER, TILO		Administration		ICC member for reconstruction				0.15					0.15	
			IceTop Operations		IceTop Operations					0.10				0.10	
			Physics Filters		CR-WG Filter							0.15		0.15	
				CR-WG Lead							0.25		0.25		
		WALDENMAIER, TILO Total								0.15	0.10		0.40	0.65	
<b>HUMB Total</b>										<b>0.15</b>	<b>0.13</b>		<b>0.40</b>	<b>0.10</b>	<b>0.78</b>
MPI	KE	RESCONI, ELISA		Administration		Analysis Coordinator				0.50					0.50
		RESCONI, ELISA Total								0.50				0.50	
	PO	MPI PO		Data Quality		Data Quality & DeepCore								0.60	0.60
		MPI PO Total									0.00			0.60	0.60
	GR	MPI GR		Detector Monitoring		Detector Monitoring					0.05				0.05
MPI GR Total									0.05			0.00	0.05		
<b>MPI Total</b>										<b>0.50</b>	<b>0.05</b>			<b>0.60</b>	<b>1.15</b>
RWTH	KE	WIEBUSCH, CHRISTOPH		Administration		Coordinate BMBF Funding				0.10					0.10
		WIEBUSCH, CHRISTOPHER Total								0.10				0.10	
	SC	RWTH SC		Core Software		Maintain Reconstruction Framework						0.10			0.10
				Engineering and R&D Support		Acoustic R&D Support				0.10					0.10
				Simulation Production		Simulation Production on cluster/GRID						0.10			0.10
			RWTH SC Total								0.10	0.00	0.20	0.00	0.30
	PO	BOERSMA, DAVID RW		Physics Filters		Gal Cen Filter (Moon Filter)							0.15		0.15
						muon channel WG Co. Chair							0.25		0.25
			BOERSMA, DAVID RWTH Total											0.40	0.40
	GR	RWTH GR		Core Software		Maintain Reconstruction Framework						0.15			0.15
				Detector Monitoring		Monitoring (3 weeks)					0.09				0.09
		Reconstruction/ Analysis tools		Reconstruction Software								0.30	0.30		
		Simulation Production		Simulation Production on cluster/GRID						0.85			0.85		
		RWTH GR Total									0.09	1.00	0.30	1.39	
SCHUKRAFT, ANNE			Data Production Processing		Photonics Production						0.25			0.25	
			SCHUKRAFT, ANNE Total									0.25			0.25
WALLRAFF, MARIUS			Reconstruction/ Analysis tools		New Feature Extractor								0.50	0.50	
			WALLRAFF, MARIUS Total											0.50	0.50
<b>RWTH Total</b>										<b>0.20</b>	<b>0.09</b>	<b>1.45</b>	<b>0.40</b>	<b>0.80</b>	<b>2.94</b>
SU	KE	HULTH, PER OLOF		Administration		ExecCom member				0.20					0.20
						ICB Member				0.05					0.05
						Outreach				0.15					0.15
				Physics Filters		Low Energy DeepCore WG Lead							0.25		0.25
				HULTH, PER OLOF Total								0.40		0.25	0.65
			HULTQVIST, KLAS		Simulation Programs		Photonics/Simulation Work, hit-maker							0.15	0.15
			HULTQVIST, KLAS Total											0.15	0.15
			WALCK, CHRISTIAN		Administration		Pubcom member				0.10				0.10
					Simulation Programs		Photonics/Simulation Work							0.05	0.05
			WALCK, CHRISTIAN Total								0.10			0.05	0.15
	SC	FINLEY, CHAD SU		Administration		Coordination with LIGO				0.10					0.10
				Physics Filters		WG Lead							0.25		0.25
				Simulation Programs		Simulation Programs: neutrino-generator								0.20	0.20
			FINLEY, CHAD SU Total								0.10		0.25	0.20	0.55
			SEO, SEON-HEE		Physics Filters		Develop & verify filters							0.05	0.05
				Reconstruction/ Analysis tools		Photonics/Simulation Work								0.15	0.15
		SEO, SEON-HEE Total										0.05	0.15	0.20	
		SU SC		Computing Resources		Computing Resources						0.50		0.50	
		SU SC Total										0.50		0.50	
GR	DANNINGER, MATTIA		Physics Filters		WIMP Trigger & Filter							0.15		0.15	
			DANNINGER, MATTIAS Total											0.15	0.15
			JOHANSSON, HENRIK		Physics Filters		UHE Trigger & Filter							0.10	0.10
					Simulation Production		GRID/Simulation production & development						0.20		0.20
			JOHANSSON, HENRIK Total										0.20	0.10	0.30
		SU GR		Detector Monitoring		Detector Monitoring					0.06				0.06
		SU GR Total									0.06				0.06
<b>SU Total</b>										<b>0.60</b>	<b>0.06</b>	<b>0.70</b>	<b>0.80</b>	<b>0.55</b>	<b>2.71</b>

## IceCube M&O Staffing Matrix sort by Institutions v8.2 2010.0430.xls

Institution	Labor Cat.	Names		WBS L3		Tasks				WBS 2.1	WBS 2.2	WBS 2.3	WBS 2.4	WBS 2.5	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									
UBOCHUM	KE	BECKER, JULIA		Administration	Pubcom member			0.10							0.10	
		BECKER, JULIA Total					0.10								0.10	
	PO	Dreyer, Jens		Simulation Programs	Simulation Programs: neutrino-generator Update MMC from Java to C++							0.20		0.20	0.20	
		Dreyer, Jens Total												0.25	0.25	
	GR	Olivo, Martino		Simulation Programs	Update MMC from Java to C++								0.25		0.25	
		Olivo, Martino Total											0.25		0.25	
		UBOCHUM GR		Detector Monitoring	Detector Monitoring						0.03					0.03
	UBOCHUM GR Total									0.03					0.03	
	<b>UBOCHUM Total</b>										<b>0.10</b>	<b>0.03</b>			<b>0.70</b>	<b>0.83</b>
UBONN	KE	KOWALSKI, MAREK		Administration	Pubcom member			0.10							0.10	
		KOWALSKI, MAREK		Physics Filters		cascades WG Co-Lead Point source WG Co-Lead							0.25		0.25	
				TFT Coordination		TFT Board member							0.25		0.25	
		KOWALSKI, MAREK Total											0.10	0.60	0.70	
	PO	Boeser Sebastian		Run Coordination	Run coordinator						0.50				0.50	
		Boeser Sebastian Total									0.50				0.50	
	GR	FRANCKOWIAK, ANN		Physics Filters	Alert System for follow-up								0.20		0.20	
		FRANCKOWIAK, ANNA Total											0.20		0.20	
		PANKNIN, SEBASTIAN		Physics Filters	IC-59 Pole Filters								0.05		0.05	
		PANKNIN, SEBASTIAN Total											0.05		0.05	
	UBONN GR		Detector Monitoring	Detector Monitoring						0.03					0.03	
	UBONN GR Total		Reconstruction/ Analysis tools			Reconstruction/ Analysis tools								0.20	0.20	
	UBONN GR Total												0.03		0.20	
	UBONN GR Total													0.20	0.23	
	AD	UBONN AD		Administration	Host Fall Collaboration Meeting			0.10								0.10
		UBONN AD Total														0.10
<b>UBONN Total</b>										<b>0.20</b>	<b>0.53</b>		<b>0.85</b>	<b>0.20</b>	<b>1.78</b>	
UC	SC	GROSS, ANDREAS		DATA QUALITY, RECO	Data Quality, Reco. & Sim. Tools Coordinator ("Low-level" Analysis Coordinator)								0.50		0.50	
		GROSS, ANDREAS Total												0.50	0.50	
	GR	UC GR		Detector Monitoring	Detector Monitoring						0.02				0.02	
		UC GR		Run Coordination	Flasher Runs						0.10				0.10	
UC GR Total											0.12			0.12		
<b>UC Total</b>											<b>0.12</b>		<b>0.50</b>	<b>0.62</b>		
UGENT	SC	UGENT SC		Engineering and R&D Sup	Acoustic R&D Support			0.05							0.05	
		UGENT SC		Simulation Programs		Support IceTop Simulations, IceTop Calibrations, IceTop Reconstruction							0.10		0.10	
				UGENT SC Total									0.05		0.10	0.15
	GR	UGENT GR		Detector Monitoring	Detector Monitoring						0.03				0.03	
		UGENT GR		Engineering and R&D Sup		Acoustic R&D Support			0.05						0.05	
				Simulation Programs		Support IceTop Simulations, IceTop Calibrations, IceTop Reconstruction							0.40		0.40	
UGENT GR Total											0.05	0.03	0.40	0.48		
<b>UGENT Total</b>										<b>0.10</b>	<b>0.03</b>		<b>0.50</b>	<b>0.63</b>		
ULB	KE	BERTRAND, DANIEL		Administration	ExecCom member			0.20							0.20	
		BERTRAND, DANIEL Total													0.20	
		HANSON, KAE ULB		Data Acquisition		Data Acquisition						0.20			0.20	
				Engineering and R&D Sup		EMI/R&D			0.10						0.10	
		HANSON, KAE ULB Total										0.10	0.20	0.10	0.40	
	PO	Marotta, Alberto		Core Software	Maintain and Operate Database Systems (I3OmDb)							0.20			0.20	
		Marotta, Alberto Total		Simulation Production			Computer Cluster - simulation						0.30		0.30	
	GR	ULB GR		Detector Monitoring	Detector Monitoring						0.03				0.03	
		ULB GR		Physics Filters	Study of Tau Filters at South Pole								0.10			0.10
ULB GR Total											0.03	0.00	0.10	0.13		
<b>ULB Total</b>										<b>0.30</b>	<b>0.23</b>	<b>0.50</b>	<b>0.20</b>		<b>1.23</b>	
UMH	GR	KOHNNEN, GEORGE		Computing Resources	IC database management							0.30			0.30	
		KOHNNEN, GEORGE		Detector Monitoring	Detector Monitoring						0.03				0.03	
	KOHNNEN, GEORGE Total											0.03	0.30	0.33		
<b>UMH Total</b>											<b>0.03</b>	<b>0.30</b>			<b>0.33</b>	
UOX	KE	SARKAR, SUBIR		Detector Monitoring	Detector Monitoring						0.02				0.02	
		SARKAR, SUBIR		Simulation Programs	Yellow Book-maintenance									0.10	0.10	
	SARKAR, SUBIR Total											0.02		0.10	0.12	
<b>UOX Total</b>											<b>0.02</b>			<b>0.10</b>	<b>0.12</b>	



## IceCube M&O Staffing Matrix sort by Institutions v8.2 2010.0430.xls

Institution	Labor Cat.	Names		WBS L3		Tasks				WBS 2.1	WBS 2.2	WBS 2.3	WBS 2.4	WBS 2.5	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									
UU	KE	BOTNER, OLGA	Administration	Outreach						0.05					0.05	
				Pubcom Chair						0.40					0.40	
		BOTNER, OLGA Total									0.45					0.45
		de los HEROS, CARLOS	Physics Filters	WIMP WG Lead									0.25			0.25
			TFT Coordination	TFT Board member										0.10		0.10
		de los HEROS, CARLOS Total												0.35		0.35
	HALLGREN, ALLAN	Administration	Outreach							0.05					0.05	
			Speakers Comm member							0.10					0.10	
		Engineering and R&D Sup	Acoustic R&D Support							0.20					0.20	
	HALLGREN, ALLAN Total									0.35					0.35	
	PO	MILLER, JONATHAN	Simulation Programs	Simulation Programs: photonics										0.20	0.20	
		MILLER, JONATHAN Total													0.20	0.20
	GR	ENGDEGARD, OLLE	Physics Filters	Online filter development & testing									0.15		0.15	
		ENGDEGARD, OLLE Total											0.15		0.15	
		UU GR	Detector Monitoring	Detector Monitoring							0.03				0.03	
UU GR Total										0.03				0.03		
<b>UU Total</b>										<b>0.80</b>	<b>0.03</b>	<b>0.50</b>	<b>0.20</b>	<b>1.53</b>		
VUB	KE	VUB KE	Physics Filters	Verify Filters									0.20	0.20		
		VUB KE Total												0.20	0.20	
	PO	Strahler, Erik	Simulation Production	Vetting new sim. releases with test datasets & compare with experimental data at low level								0.50			0.50	
		Strahler, Erik Total										0.50			0.50	
		VUB PO	Physics Filters	Verify Filters									0.30		0.30	
	VUB PO Total											0.30			0.30	
	GR	VUB GR	Detector Monitoring	Detector Monitoring							0.03				0.03	
		VUB GR Total									0.03				0.03	
	<b>VUB Total</b>										<b>0.03</b>	<b>0.50</b>	<b>0.50</b>	<b>1.03</b>		
	WUPPERTAL	KE	HELBING, KLAUS	Administration	Speakers Comm member						0.10				0.10	
			Engineering and R&D Sup	R&D Lead						0.10				0.10		
HELBING, KLAUS Total										0.20				0.20		
WUPPERTAL KE			Engineering and R&D Sup	RFI						0.10					0.10	
WUPPERTAL KE Total									0.10				0.10			
PO		KARG, TIMO	Engineering and R&D Sup	Acoustic Lead							0.10				0.10	
			Simulation Production	Simulation Production								0.20			0.20	
KARG, TIMO Total									0.10		0.20			0.30		
GR		WUPPERTAL GR	Detector Monitoring	AURA, SPATS, surface antenna operations (RICE)							0.45				0.45	
				South Pole EMI Monitoring							0.15				0.15	
			Physics Filters	New SUSY Filter									0.20		0.20	
		Reconstruction/ Analysis t	New SUSY Reconstruction, Simulation, Propagation, Monopole, Photonics										0.50		0.50	
	Simulation Production	Simulation Production									0.20			0.20		
WUPPERTAL GR Total										0.60	0.20	0.20	0.50	1.50		
<b>WUPPERTAL Total</b>										<b>0.40</b>	<b>0.60</b>	<b>0.40</b>	<b>0.20</b>	<b>0.50</b>	<b>2.10</b>	
MAINZ	KE	Kópke, Lutz	Administration	ExecCom member						0.15				0.15		
		Kópke, Lutz Total									0.15				0.15	
	SC	AHRENS, JENS	Simulation Production	Simulation Production								0.15			0.15	
		AHRENS, JENS Total										0.15			0.15	
	GR	Kroll, Gösta	SuperNova Operations	SuperNova Operations							0.50				0.50	
		Kroll, Gösta Total									0.50				0.50	
		Lünemann, Jan	Reconstruction/ Analysis t	Reconstruction Tools										0.20	0.20	
		Lünemann, Jan Total												0.20	0.20	
		SCHATTO, KAI	Detector Monitoring	Monitoring IceCube Live integration							0.35				0.35	
		SCHATTO, KAI Total										0.35			0.35	
		UM GR	Detector Monitoring	Detector Monitoring							0.05				0.05	
		UM GR Total										0.05				0.05
		WIEBE, KLAUS	Simulation Production	Simulation Production									0.30			0.30
	SuperNova Operations		SuperNova IceCube Live integration								0.10				0.10	
	WIEBE, KLAUS Total										0.10	0.30			0.40	
<b>MAINZ Total</b>										<b>0.15</b>	<b>1.00</b>	<b>0.45</b>	<b>0.20</b>	<b>1.80</b>		
<b>Grand Total</b>										<b>3.85</b>	<b>3.90</b>	<b>7.80</b>	<b>4.60</b>	<b>6.85</b>	<b>27.00</b>	