

IceCube MOU Summary v6 2009.0508 - DRAFT.xls
M&O Core & In-Kind - Physicists

v6 **DRAFT** May 8th, 2009

Institution (Lead)	Head Count				M&O CORE & IN KIND					Total
	Ph.D. scientists	Faculty	Sc / Post Docs	Students	2.1 Program Management	2.2 Detector Operations & Maintenance	2.3 Computing & Data Management	2.4 Triggering & Filtering	2.5 Data Quality, Reconstruction & Simulation Tools	
University of Alabama (Dawn Williams)	2	(1	1	2)		0.33			0.6	0.93
University of Alaska (Katherine Rawlins)	1	(1	0	0)		0.02			0.4	0.42
Clark Atlanta (George Japaridze)	1	(1	0	0)		0.015				0.015
Georgia Tech (Ignacio Taboada)	1	(1	0	2)		0.43	0.2	0.25		0.88
LBNL (Spencer Klein)	7	(3	4	1)	0.4	1.14	0.2	0.25	0.35	2.34
Ohio State University (James Beatty)	4	(1	3	1)		0.23		0.3	0.3	0.83
Pennsylvania State University (Doug Cowen)	7	(3	4	4)	0.3	0.56	1.25	0.65	0.9	3.66
Southern University (Ali Fazely)	4	(3	1	0)		0.015	0.2		0.3	0.515
University of California, Berkeley (Buford Price)	5	(1	4	2)	0.1	0.88		0.25	0.5	1.73
University of California, Irvine (Steve Barwick)	2	(1	1	1)		0.02				0.02
University of Delaware (Paul Evenson, acting for T. Gaisser)	8	(4	4	2)	0.6	1.06	0.2	0.25	0.3	2.41
University of Kansas (Dave Besson)	1	(1	0	0)	0.1	0.02				0.12
University of Maryland (Greg Sullivan)	7	(4	3	6)	0.6	0.54	1.15	1.0	1.4	4.69
University of Wisconsin, River Falls (Jim Madsen)	4	(2	2	0)	0.25	0.05			0.1	0.4
University of Wisconsin, Madison (Albrecht Karle)	19	(5	14	13)	1.62	2.29	1.0	1.25	3.5	9.66
US Institutions Subtotal	73	(32	41	34)	3.97	7.6	4.2	4.2	8.65	28.62
RWTH Aachen (Christopher Wiebusch)	3	(1	2	6)	0.2	0.045	0.65	0.3	0.6	1.795
DESY-Zeuthen (Christian Spiering)	9	(6	3	6)	0.65	0.48	2.25	0.25	0.1	3.73
Stockholm University (Per Olof Hulth)	5	(4	1	3)	0.15	0.06	0.2	0.25	0.9	1.56
Universität Dortmund (Wolfgang Rhode)	2	(2	0	2)		0.03	0.65			0.68
Universität Mainz (Lutz Köpke)	1	(1	0	6)	0.15	0.76	0.4		0.2	1.51
Universität Wuppertal (Klaus Helbing)	3	(2	1	5)	0.3	0.36	0.4	0.15	0.4	1.61
Université Libre de Bruxelles (Daniel Bertrand)	3	(2	1	3)	0.3	0.23	0.4	0.1		1.03
MPI Heidelberg (Elisa Resconi)	2	(1	1	3)	0.5	0.145			0.7	1.345
Humboldt Universität Berlin (Hermann Kolanoski)	3	(2	1	2)	0.5	0.03		0.8	0.5	1.83
Université de Mons-Hainaut (Philippe Herquet)	1	(1	0	1)		0.03	0.3			0.33
University of Canterbury (Jenni Adams)	3	(2	1	3)		0.12			0.3	0.42
Chiba University (Shigeru Yoshida)	3	(1	2	3)		0.03		0.4	0.6	1.03
University of Gent (Dirk Ryckbosch)	3	(1	2	4)	0.1	0.03			0.2	0.33
Utrecht University (Nick van Eijndhoven)	1	(1	0	1)		0.02			0.2	0.22
Uppsala University (Olga Botner)	3	(3	0	2)	0.2	0.16		0.35		0.71
Vrije Universiteit Brussel (Catherine de Clercq)	1	(1	0	2)		0.03	0.1	0.15		0.28
University of Oxford (Subir Sarkar)	2	(1	1	0)		0.02			0.5	0.52
Ecole Polytechnique Federale de Lausanne (Mathieu Ribordy)	2	(1	1	2)		0.13			0.2	0.33
Non-US Institutions Subtotal	50	(33	17	54)	3.1	2.71	5.35	2.75	5.4	19.26
Total US & Non-US	123	(65	58	88)	7.02	10.31	9.55	6.95	14.05	47.88

IceCube MOU Summary v6 2009.0508 - DRAFT.xls
M&O Core & In-Kind - Physicists

v6 **DRAFT** May 8th, 2009

Institution (Lead)	Head Count				IN KIND ONLY						IN KIND ONLY - FTE by Labor Category				
	Ph.D. scientists	Faculty	Sc / Post Docs	Students	2.1 Program Management	2.2 Detector Operations & Maintenance	2.3 Computing & Data Management	2.4 Triggering & Filtering	2.5 Data Quality, Reconstruction & Simulation Tools	Total	Faculty	Scient. / Post Docs	Grad Students	Other	Total FTE
University of Alabama (Dawn Williams)	2	(1	1	2)		0.33			0.6	0.93	0.3	0.615	0.015		0.93
University of Alaska (Katherine Rawlins)	1	(1	0	0)		0.02			0.4	0.42	0.42				0.42
Clark Atlanta (George Japaridze)	1	(1	0	0)		0.015				0.015		0.015			0.015
Georgia Tech (Ignacio Taboada)	1	(1	0	2)		0.43	0.2	0.25		0.88	0.25	0.2	0.43		0.88
LBNL (Spencer Klein)	7	(3	4	1)	0.4	0.49	0.2	0.25	0.35	1.69	0.9	0.775	0.015		1.69
Ohio State University (James Beatty)	4	(1	3	1)		0.23		0.3	0.3	0.83		0.66	0.17		0.83
Pennsylvania State University (Doug Cowen)	7	(3	4	4)	0.3	0.41	0.25	0.65	0.9	2.51	0.65	1.13	0.73		2.51
Southern University (Ali Fazely)	4	(3	1	0)		0.015	0.2		0.3	0.515	0.35	0.165			0.515
University of California, Berkeley (Buford Price)	5	(1	4	2)	0.1	0.88		0.25		1.23	0.1	1.015	0.115		1.23
University of California, Irvine (Steve Barwick)	2	(1	1	1)		0.02				0.02		0.01	0.01		0.02
University of Delaware (Paul Evenson, acting for T. Gaisser)	8	(4	4	2)	0.6	0.06	0.15	0.25	0.3	1.36	0.6	0.63	0.13		1.36
University of Kansas (Dave Besson)	1	(1	0	0)	0.1	0.02				0.12	0.12				0.12
University of Maryland (Greg Sullivan)	7	(4	3	6)	0.6	0.34	1.15	0.7	1	3.79	0.75	1.03	2.01		3.79
University of Wisconsin, River Falls (Jim Madsen)	4	(2	2	0)	0.25	0.05			0.1	0.4	0.3	0.1			0.4
University of Wisconsin, Madison (Albrecht Karle)	19	(5	14	13)	1.03	1.69	0.3	1.25	3	7.27	0.53	2.52	3.72	0.5	7.27
US Institutions Subtotal	73	(32	41	34)	3.38	5	2.45	3.9	7.25	21.98	5.3	8.9	7.3	0.5	21.98
RWTH Aachen (Christopher Wiebusch)	3	(1	2	6)	0.2	0.045	0.65	0.3	0.6	1.795	0.1	0.615	1.08		1.795
DESY-Zeuthen (Christian Spiering)	9	(6	3	6)	0.65	0.48	2.25	0.25	0.1	3.73	0.45	0.61	0.97	1.7	3.73
Stockholm University (Per Olof Hult)	5	(4	1	3)	0.15	0.06	0.2	0.25	0.9	1.56	0.65	0.45	0.46		1.56
Universität Dortmund (Wolfgang Rhode)	2	(2	0	2)		0.03	0.65			0.68	0.25		0.43		0.68
Universität Mainz (Lutz Köpke)	1	(1	0	6)	0.15	0.76	0.4		0.2	1.51	0.15		1.36		1.51
Universität Wuppertal (Klaus Helbing)	3	(2	1	5)	0.3	0.36	0.4	0.15	0.4	1.61	0.3	0.2	1.11		1.61
Universite Libre de Bruxelles (Daniel Bertrand)	3	(2	1	3)	0.3	0.23	0.4	0.1		1.03	0.6	0.2	0.03	0.2	1.03
MPI Heidelberg (Elisa Resconi)	2	(1	1	3)	0.5	0.145			0.7	1.345	0.5	0.70	0.145		1.345
Humboldt Universität Berlin (Hermann Kolanoski)	3	(2	1	2)	0.5	0.03		0.8	0.5	1.83	0.45	0.80	0.18	0.4	1.83
Universite de Mons-Hainaut (Philippe Herquet)	1	(1	0	1)		0.03	0.3			0.33			0.33		0.33
University of Canterbury (Jenni Adams)	3	(2	1	3)		0.12			0.3	0.42		0.15	0.27		0.42
Chiba University (Shigeru Yoshida)	3	(1	2	3)		0.03		0.4	0.6	1.03	0.45	0.20	0.38		1.03
University of Gent (Dirk Ryckbosch)	3	(1	2	4)	0.1	0.03			0.2	0.33		0.15	0.18		0.33
Utrecht University (Nick van Eijndhoven)	1	(1	0	1)		0.02			0.2	0.22			0.22		0.22
Uppsala University (Olga Botner)	3	(3	0	2)	0.2	0.16		0.35		0.71	0.55		0.16		0.71
Vrije Universiteit Brussel (Catherine de Clercq)	1	(1	0	2)		0.03	0.1	0.15		0.28	0.1		0.18		0.28
University of Oxford (Subir Sarkar)	2	(1	1	0)		0.02			0.5	0.52	0.25	0.27			0.52
Ecole Polytechnique Federale de Lausanne (Mathieu Ribordy)	2	(1	1	2)		0.13			0.2	0.33		0.30	0.03		0.33
Non-US Institutions Subtotal	50	(33	17	54)	3.1	2.71	5.35	2.75	5.4	19.26	4.8	4.6	7.5	2.3	19.26
Total US & Non-US	123	(65	58	88)	6.43	7.71	7.8	6.65	12.65	41.24	10.1	13.5	14.9	2.8	41.24

IceCube MOU Summary v6 2009.0508 - DRAFT.xls
M&O Core & In-Kind - Physicists

v6 **DRAFT** May 8th, 2009

v6 DRAFT May 8th, 2009		Head Count				Grad Students - In Kind activities											
Institution (Lead)	Ph.D. scientists	Faculty	Sc / Post Docs	Students	Monitoring	Calibration	Supernova Operations	Reconstruction Framework	Simulation Production	Core Software	Filters & Triggers	Reconstruction Tools	Simulation Tools	Data Quality	R&D (Acoustic , Radio)	Total In Kind FTE	
University of Alabama (Dawn Williams)	2	(1	1	2)	0.015											0.015	
University of Alaska (Katherine Rawlins)	1	(1	0	0)													
Clark Atlanta (George Japaridze)	1	(1	0	0)													
Georgia Tech (Ignacio Taboada)	1	(1	0	2)		0.43										0.43	
LBNL (Spencer Klein)	7	(3	4	1)	0.015											0.015	
Ohio State University (James Beatty)	4	(1	3	1)	0.015						0.15					0.165	
Pennsylvania State University (Doug Cowen)	7	(3	4	4)	0.03	0.15					0.15	0.25		0.15		0.73	
Southern University (Ali Fazely)	4	(3	1	0)												0	
University of California, Berkeley (Buford Price)	5	(1	4	2)	0.015	0.1										0.115	
University of California, Irvine (Steve Barwick)	2	(1	1	1)	0.01											0.01	
University of Delaware (Paul Evenson, acting for T. Gaisser)	8	(4	4	2)	0.03				0.1							0.13	
University of Kansas (Dave Besson)	1	(1	0	0)												0	
University of Maryland (Greg Sullivan)	7	(4	3	6)													
University of Wisconsin, River Falls (Jim Madsen)	4	(2	2	0)	0.06				0.25	0.75	0.45	0.25	0.25			2.01	
University of Wisconsin, Madison (Albrecht Karle)	19	(5	14	13)												0	
US Institutions Subtotal	73	(32	41	34)	0.3	1.5	0.2	0.0	0.7	0.8	1.3	1.5	0.9	0.4	0.0	7.3	
RWTH Aachen (Christopher Wiebusch)	3	(1	2	6)	0.03			0.15	0.3		0.15	0.2	0.25			1.08	
DESY-Zeuthen (Christian Spiering)	9	(6	3	6)	0.12			0.15	0.25		0.25	0.1			0.1	0.97	
Stockholm University (Per Olof Hulth)	5	(4	1	3)	0.06								0.4			0.46	
Universität Dortmund (Wolfgang Rhode)	2	(2	0	2)	0.03				0.4							0.43	
Universität Mainz (Lutz Köpke)	1	(1	0	6)	0.06		0.7		0.4			0.2				1.36	
Universität Wuppertal (Klaus Helbing)	3	(2	1	5)	0.06				0.4		0.15	0.2	0.2		0.1	1.11	
Universite Libre de Bruxelles (Daniel Bertrand)	3	(2	1	3)	0.03											0.03	
MPI Heidelberg (Elisa Resconi)	2	(1	1	3)	0.045								0.1			0.145	
Humboldt Universität Berlin (Hermann Kolanoski)	3	(2	1	2)	0.03						0.15					0.18	
Universite de Mons-Hainaut (Philippe Herquet)	1	(1	0	1)	0.03					0.3						0.33	
University of Canterbury (Jenni Adams)	3	(2	1	3)	0.02	0.1								0.15		0.27	
Chiba University (Shigeru Yoshida)	3	(1	2	3)	0.03						0.15		0.2			0.38	
University of Gent (Dirk Ryckbosch)	3	(1	2	4)	0.03				0.1						0.05	0.18	
Utrecht University (Nick van Eindhoven)	1	(1	0	1)	0.02							0.2				0.22	
Uppsala University (Olga Botner)	3	(3	0	2)	0.03	0.13										0.16	
Vrije Universiteit Brussel (Catherine de Clercq)	1	(1	0	2)	0.03						0.15					0.18	
University of Oxford (Subir Sarkar)	2	(1	1	0)													
Ecole Polytechnique Federale de Lausanne (Mathieu Ribordy)	2	(1	1	2)	0.03											0.03	
Non-US Institutions Subtotal	50	(33	17	54)	0.7	0.2	0.7	0.3	1.9	0.3	1.0	0.9	1.2	0.2	0.3	7.5	
Total US & Non-US	123	(65	58	88)	1.0	1.7	0.9	0.3	2.5	1.1	2.3	2.4	2.0	0.6	0.3	14.86	