IceCube Analysis Matrix v21.0 2016.1025.xlsx

Analysis Elements / Institutions	Alabama	Alaska	Clark Atlanta	Delaware	Drexel	Georgia Tech	UC Irvine	Kansas	LBNL/UC Berkeley	Marquette	Maryland	MIT	Michigan State	Ohio State	Penn State	Rochester	SDSMT	Southern	Stony Brook	UT Arlington	UW-Madison	UWRF	Yale	Aachen	Adelaide	Alberta	Bochum	Canterbury NZ	Chiba	DESY	Dortmund	Erlangen	Geneva	Gent	Humboldt Berlin	Mainz	Muenster	TU Munich	NBI/Copenhagen	Oxford	Stockholm	SKKU	SNOLAB	ULB	Uppsala	VUB	Wuppertal
Low Energy/Neutrino Oscillations WG																																															
Atmospheric Mixing Parameters											X		X								X					X				X																	
Tau Neutrino Appearance/PMNS Unitarity													X		X																								X								
Neutrino Mass Ordering																								X																							
Neutrino Cross-section Measurements																																															
Atmospheric Neutrino Flux Measurements (GeV)																										X					X					X											
Sterile Neutrino Searches (TeV)												X									X			X																							
Sterile Neutrino Searches (GeV)																														X																	
Non-Standard Neutrino Interactions												X									X																										
Lorentz Violation/Quantum Gravity Searches												X																																			
Diffuse/Atmospheric neutrino WG																																															
Astrophysical Neutrino Flux Measurement																			X		X			X		X			X																		
Astrophysical Neutrino Flavor Ratio Analysis																					X					X				X																	
Atmospheric Neutrino Flux Measurements (TeV)																					X			X		X			X		X																
Atmospheric Neutrino Flavor Ratio measurement									X																											X											
High-Energy/Cosmogenic Neutrino Searches																													X																		
High-Energy Event Energy Estimators									X												X				X							X															
Measurement of High-Energy Neutrino Cross Section									X										X																												
Contained Event Inelasticity Distribution Measurements									X																																						
Earth Core Neutrino Tomography																					X																										
Point Source WG																																															
All-sky point source searches						X																															X										
Point source searches with contained events					X																X									X						X								X			
Source Catalog/Stacking PS searches					X																									X			X					X								X	
UHECR motivated PS searches					X																X												X														
Diffuse and Point source combination fits																								X	X																						
Multi-source/anisotropy PS searches					X							X												X								X						X									
Galactic Plane PS searches																								X														X			X						
Extended source PS searches																																											X	X		
Time Dependent/Realtime PS searches																										X				X			X								X			X			
Transients/GRB WG																																															
Prompt Neutrinos from GRBs											X																																				
Realtime GRB neutrino searches											X																																				
Neutrinos from Fast Radio Bursts																					X																										
Searches for Low Energy Transients						X																																									
Realtime followup of neutrino multiplets																														X					X												
Realtime Astrophysical (HESE/EHE) neutrino alerts															X											X			X																		
Realtime Alert Response																																												X			
GRB Precursor/Afterglow Neutrino searches																																															
Beyond the Standard Model WG																																															
WIMP signal from Sun													X																			X			X					X	X						
WIMP signal from Earth																																												X			

Analysis Elements / Institutions	Alabama	Alaska	Clark Atlanta	Delaware	Drexel	Georgia Tech	UC Irvine	Kansas	LBNL/UC Berkeley	Marquette	Maryland	MIT	Michigan State	Ohio State	Penn State	Rochester	SDSMT	Southern	Stony Brook	UT Arlington	UW-Madison	UWRF	Yale	Aachen	Adelaide	Alberta	Bochum	Canterbury NZ	Chiba	DESY	Dortmund	Erlangen	Geneva	Gent	Humboldt Berlin	Mainz	Muenster	TU Munich	NBI/Copenhagen	Oxford	Stockholm	SKKU	SNOLAB	ULB	Uppsala	VUB	Wuppertal
Boosted Dark Matter searches																																				X											
Decaying Dark Matter searches	X																							X																		X		X			
Dark Matter Annihilation in Galaxy Halo/Center																																							X		X						
Solar Atmospheric Neutrinos																																										X					
SUSY Model parameter limits																																												X			
Neutrino decay, Lorentz/CPT invariance tests												X																																			
Magnetic monopole searches																								X						X															X		X
Direct BSM particle detection																																		X													X
Searches for Strangelets, Q-balls																																															
Searches for TeV scale extra dimensions																																															
Dark Photons																																															
Supernova WG																																															
MeV Supernova Neutrino Burst searches																X																				X											
Galactic Supernova Axion Searches																X																															
Neutrino from Solar Bursts																																														X	
Low Energy neutrinos from Fast Radio Bursts																					X																										
Searches for hidden Galactic Supernova																																				X											
Cosmic Rays WG																																															
Primary Cosmic Ray Spectrum and Composition		X		X						X																								X													
Anisotropy in Cosmic Rays																					X																										
Atmospheric Muon Spectrum																														X	X																
Prompt Muons in High Energy Showers									X								X										X																				
Low Energy (GeV) Surface Muons				X																																											X
High-pT and ultra-forward muons									X																																						X
Cosmic ray Vetoing for High Energy Neutrino Searches				X																	X			X																							
IceTop Neutron searches														X																																	
IceTop PeV Photon searches				X																	X																										
Solar and Heliospheric Physics				X																																											
Sun shadow in Cosmic Rays																											X																				
Cascade/Tau neutrino WG																																															
Contained Low Energy Cascades																			X																												
Contained High Energy Cascades																			X		X																										
Tau Neutrino - Double Bang searches/algorithms																			X											X				X													
Tau Neutrinos - Double pulse analyses	X																				X										X																
Tau Neutrinos - Muon decay searches	X																																														
Cherenkov light yield studies for Cascades																								X																							
Muon/Tracks WG																																															
Muon Energy resolution improvements																					X			X	X						X																
Track Identifications and Reconstructions Improvements																					X					X																					
TOTALS	3	1	0	5	4	2	0	0	6	1	3	5	3	1	2	2	1	0	5	0	19	0	0	12	3	8	2	0	4	10	5	1	5	3	1	6	1	4	2	0	4	3	0	6	3	2	4

Current locations of WG Chairs and Co-Chairs (nominal 2-yr terms)