

# Project Organization, Coordination, and Advisory Mechanisms

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Director of Operations

IceCube Management and Operations

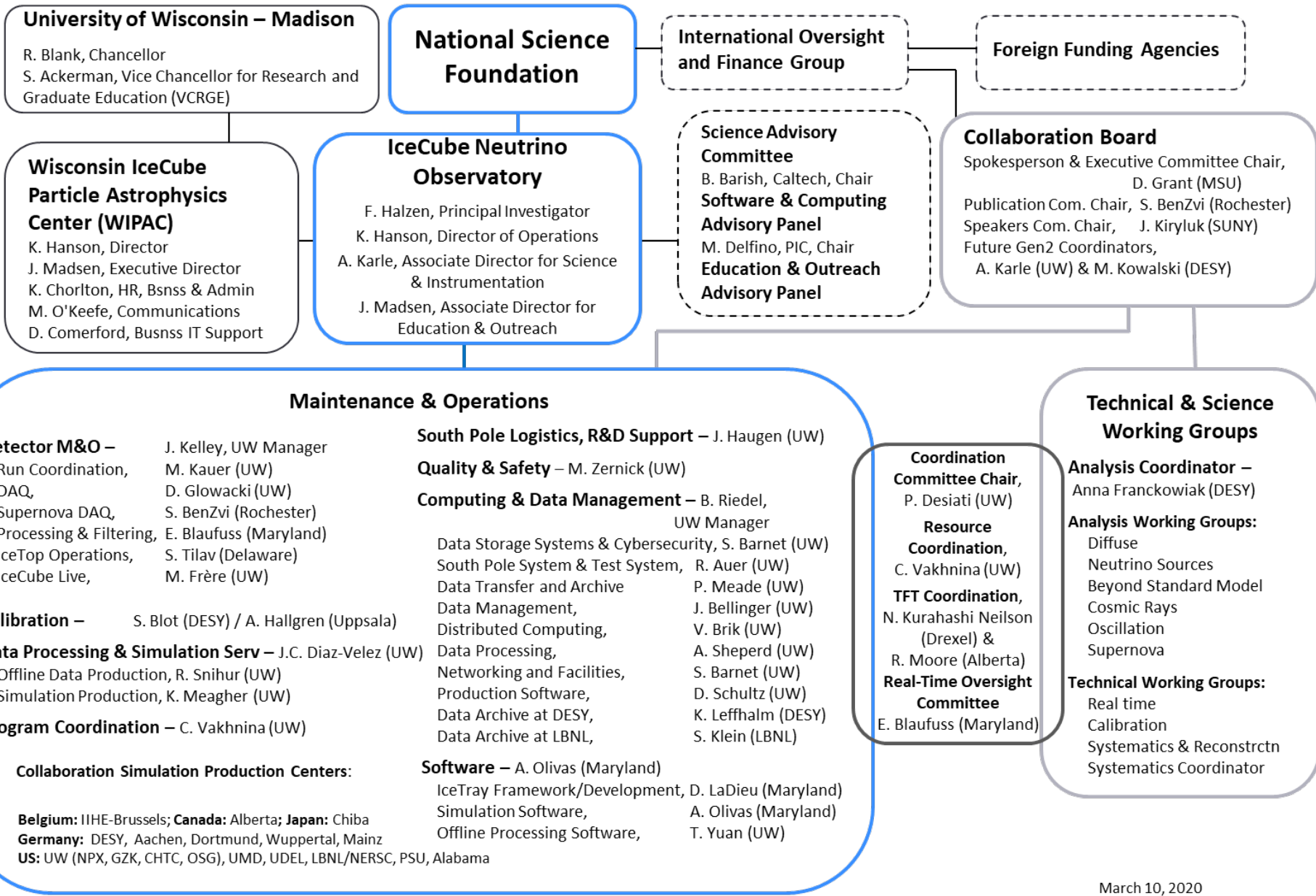
NSF Site Visit March 16, 2020





# Outline

- M&O organization
- IceCube Coordination Committee
- Software and Computing Advisory Committee
- International Oversight and Finance Group



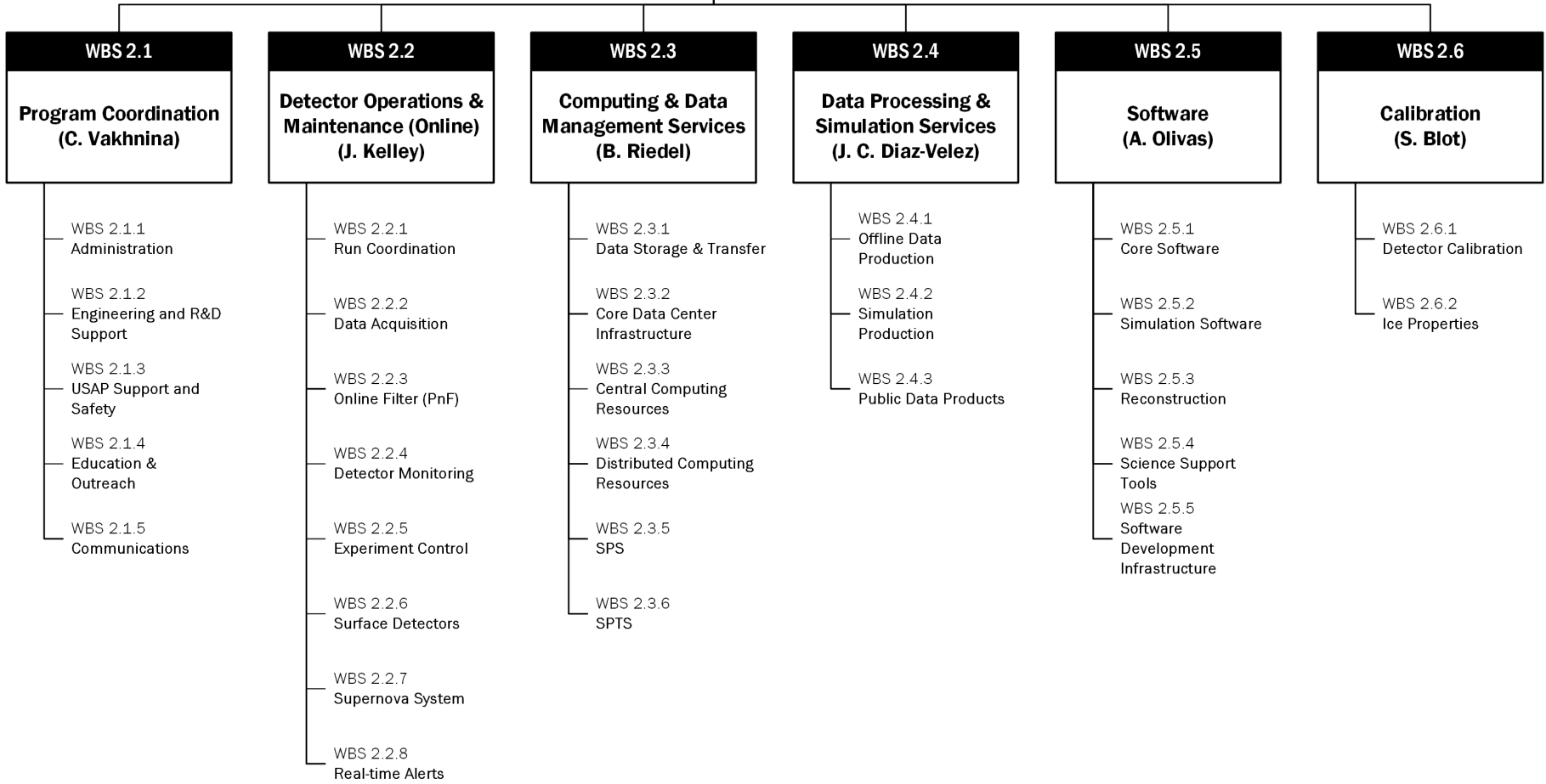
# IceCube Neutrino Observatory

F. Halzen – PI

K. Hanson – Director of Operations

A. Karle – Assoc Director for Science and Instrumentation

J. Madsen – Assoc. Director for Education and Outreach



# FTE Resources

<b>WBS L2</b>	<b>NSF M&amp;O Core</b>	<b>NSF Base Grants</b>	<b>U.S. Institutional In-Kind</b>	<b>Europe &amp; Asia Pacific In-Kind</b>	<b>Grand Total</b>
2.1 Program Management	5.08	0.40	4.26	6.40	<b>16.14</b>
2.2 Detector Operations & Maintenance	13.48	1.98	3.75	9.05	<b>28.26</b>
2.3 Computing And Data Management Services	7.85	0.05	1.38	2.00	<b>11.28</b>
2.4 Data Processing & Simulation Services	3.50	0.95	1.05	3.25	<b>8.75</b>
2.5 Software	4.05	1.90	5.93	11.15	<b>23.03</b>
2.6 Calibration	1.05	1.30	1.75	3.90	<b>8.00</b>
<b>Grand Total</b>	<b>35.01</b>	<b>6.58</b>	<b>18.12</b>	<b>35.75</b>	<b>95.46</b>



# IceCube Coordination Committee

# ICC Members

- Paolo Desiati (Chair)
- Catherine Vakhnina, IceCube Resource Coordinator
- Kael Hanson, Director of Operations
- Darren Grant, IceCube Spokesperson
- Albrecht Karle, Assoc. Director for Science and Instrumentation
- L2 Coordinators
- Erik Blaufuss, Realtime Ops Chair
- Anna Franckowiak, Analysis Coordinator
- Working group technical leads



# ICC Scope / Authority

- Match resources (labor, computing, cash) with needs.
- Top-level resource arbitration – notable recent action of ICC was rejection of proposal to reprocess from IceCube raw data: “Pass 3” reprocessing.
- TFT board remains forum for online filtering / data stream transmission arbitration.
- Monthly phone calls with bi-weekly “IceCube Technical” phone calls.
- Introduction of WG Technical Leads has led to better participation / representation of WG interests in overall ICC decision making a resource prioritization.
- Scope has expanded to cover in-kind contributions to the IceCube Upgrade.
- [Link](#) to meeting minutes / presentations



# Software and Computing Advisory Panel

# Membership

- Manuel Delfino (Chair, former Director of Port d'Informacia Cientifica, Barcelona)
- Sridhara Dasu (Chair, UW Physics, CMS)
- Peter Couvares (Syracuse, LIGO)
- Miron Livny (ex-officio, UW-Madison, OSG)
- Peter Elmer (Princeton, IRIS-HEP, CMS)
- Terry Schalk (UC Santa Cruz, LSST)
- Frank Wuertheim (UC San Diego/SDSC, CMS, OSG)
- Mark Neubauer (Univ Illinois – Urbana Champaign, ATLAS)

New members in Blue



# Scope

The IceCube Software & Computing Advisory Panel (SCAP) is composed of experts in the fields of software development and scientific computing. The SCAP advises the IceCube spokesperson and director of operations on the most efficient and effective computing resources for IceCube, including on-line computing; on-line and off-line data processing and filtering; off-line computing facilities; and simulations and analysis tools support. The spokesperson and the director of operations appoint the SCAP members and the chairperson.

# Status of SCAP

- Full [document](#) of responses to 2018 recommendations.
- As reported during last M&O Review major points:
  - Appoint M&O computing coordinator: B. Riedel in this position since late 2018
  - Goal for 10x computing to test scalability of software / middleware: 2019 **CloudBurst** experiment confirmed that we could scale to 50x capacity – the largest cloud simulation in history.
- 2020 SCAP planned for 28-29 April – currently being planned a virtual meeting due to ongoing Coronavirus travel restrictions.



# International Oversight and Finance Group

# Scope

- Created in 2004 to provide oversight and financial coordination among the international funding agencies that supported the IceCube MREFC: USA, Germany, Sweden, Belgium.
- Meets annually briefed by Collaboration Spokesperson, Director of Operations, Principal Investigator, and others as appropriate.
- Role has changed as IceCube transitioned from construction to operations.  
Review of and decisions rendered on:
  - Common Fund payments and expenditures,
  - Review of MoU scope of work between ICNO and collaborating institutions,
  - Concurrence on M&O Plans,
  - Funding issues and coordination,
  - Future facility expansion planning and coordination.



# Membership

- James Whitmore (NSF/MPS/PHY)
- Vladimir Papitashvili (NSF/OPP/ANT)
- Christian Stegman (DESY/DFG, Germany)
- Marc Hempel (BMBF, Germany)
- Leif Eriksson (VR, Sweden)
- Laurent Favart (FNRS, Belgium)
- Jorgen d'Hondt (FWO, Belgium)
- Ryohei Kobayashi (MEXT, Japan)