

# IceCube Advisory Committees and International Oversight and Finance Group

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NSF Mid-Term Review  
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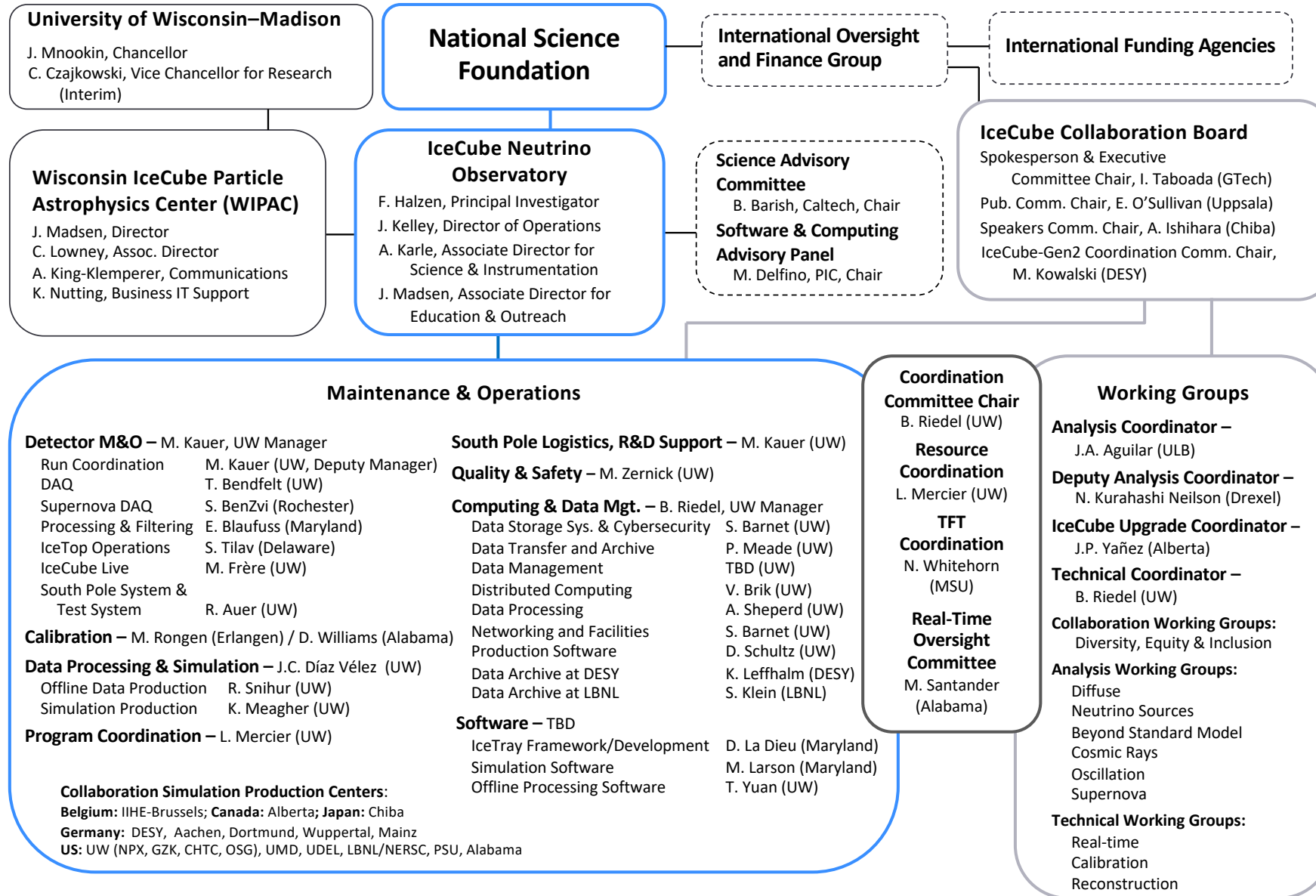




# Presenter Background

- At UW Madison since 1997
- Professor, Department of Physics, UW Madison
- IceCube: Co-PI IceCube Maintenance and Operation, PI IceCube Upgrade, Associate Director IceCube Science and Instrumentation
- Research focus: Diffuse neutrino flux, focus on lower energies with self-veto techniques.

# IceCube Neutrino Observatory Organization



# Software and Computing Advisory Panel

## Members:

- Lothar Bauerdick (FNAL, Chair)
- Peter Couvares (Caltech)
- Sridhara Dasu (UW-Madison)
- Miron Livny (UW-Madison)
- Peter Elmer (Princeton / CERN)
- Gonzalo Merino (PIC)
- Mark Neubauer (UIUC)
- Terry Schalk (UCSC)
- Frank Wuerthwein (UCSD)

## Background:

Established in 2009

**Objective:** The SCAP advises the IceCube Spokesperson(s) and Director on the following topics: online computing, online and offline data processing and filtering, off-line computing facilities, and simulations and analysis support.

A written report is provided following each meeting.

**Meeting history:** 2009, 2010, 2011, 2014, 2016, 2018, 2021.

# IceCube Upgrade: Project Advisory Panel

## Members:

- Amy Bender, Argonne NL (CMB-S4, SPT)
- Brenna Flaugher, Fermilab (CMB-S4)
- Tom Hutchings, Battelle Institute
- Albert Lazzerini, Caltech (LIGO)
- Anders Ryd, Cornell (LHC, CMS)

## Background:

Established in 2019 (with the Upgrade project)

## Objective:

- Identify issues in technical or management areas
- Point out issues in planning or execution of the project
- Advise the Upgrade Principal Investigator on possible corrective actions.

**Meeting history:** 2019, 2020, 2021, 2023

# Science Advisory Committee

## Members:

- Barry Barish, CalTech (Chair)
- Rene Ong, UCLA
- Stan Bentvelsen, NIKHEF
- Dave Nygren, UT Arlington
- Jim Yeck, UW-Madison/Brookhaven
- Tatsuya Nakada, EPFL, Lausanne
- Peter Meszaros, Penn State

## Background:

Established in 2006

**Objective:** ~ Advise ICNO and the Collaboration on strategies to maximize future science.

Eg. 2017: IceCube Upgrade (Phase 1) strategy.

**Meeting history:** 2006, 2007, 2008, 2009, 2010, 2011, 2013, 2015, 2016, 2017

Next meeting:

May 2024

Focus on future developments: ICNO science and IceCube-Gen2.

# International Oversight and Finance Group



## Members:

- Jean Cottam Allen (NSF/OPP Acting Director, USA)
- Christian Stegmann (DESY , Germany) / Ralph Engel (KIT/Helmholtz, Germany)
- Marc Hempel (Federal Ministry of Education and Research (BMBF), Germany)
- Tomas Andersson (Swedish Research Council, Sweden)
- Katarina Gårdfeldt (Swedish Polar Research Secretariat, Sweden)
- Jorgen d'Hondt (Research Foundation – Flanders (FWO), Belgium)
- Laurent Favart (National Fund for Scientific Research (FRS-FNRS), Belgium)
- Takeshi Yamamoto (Ministry of Education, Sports, Science and Technology (MEXT) /
- Aya Ishihara (Chiba), Japan)
- Suguru Nakamura (MEXT/Basic & Generic Research, Japan)

## Background:

The IOFG was created in 2004 to provide oversight and financial support for the ICNO (including construction, M&O, and research phases). The group organizes oversight reviews to discuss detector performance and physics.

## Objective: →

**Meeting history:** Meets typically annually



# International Oversight and Finance Group



## Objective:

- Review of Memoranda of Understanding (MOU) between the various institutions.
- Concurrence on the Maintenance and Operations Plan.
- Revised institutional MoU's and Annual Common Fund Report.
- Funding issues.
- Other matters related to successful operation of the IceCube Neutrino Observatory for science.
- Construction effort of IceCube Upgrade
- Future developments, IceCube-Gen2

