

Update on the IUPAP Neutrino Panel

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What is IUPAP?

International Union of Pure and Applied Physics

□ IUPAP was established in **1922** in Brussel w/ 13 member countries & the 1st General Assembly was held in 1923 in Paris.

(currently, 56 member countries in IUPAP)

The union is governed by **General Assembly** which meets every 3 years. The **council** is its top executive body, supervising the activities of **19 international commissions** and 4 affiliated commissions.

{ C4: Astroparticle physics
C11: Particles and Fields



What is IUPAP?

International Union of Pure and Applied Physics

The Aims of the Union:

- To stimulate/promote **international cooperation** in physics
- To sponsor **international meetings**
& to assist organizing committee
- To foster the preparation & publication of abstract of papers
& tables of physical constants
- To promote **international agreements** on the use of symbols,
units, nomenclature and standards
- To foster free circulation of scientists
- To encourage research & education

IUPAP Neutrino Panel

IUPAP has established the Neutrino Panel
with the mandate:

“to promote international cooperation
in the development of **experimental program**
to study the properties of neutrinos”

and

“to promote international collaboration
in the development of **future neutrino experiments**
to establish the properties of neutrinos.”

IUPAP Neutrino Panel Members

Total 18 members
from 11 countries

M. Sajjad Athar	AMU, Aligarh, India
Steve Barwick	UCI Physics and Astronomy
Thomas Brunner	McGill University/TRIUMF
Jun Cao	IHEP, Beijing
Mikhail Danilov	Lebedev Physical Inst., Russian Acad. of Sci.
Renata Zukanovich Funchal	University of São Paulo
Kunio Inoue	Tohoku University
Takaaki Kajita (+)	University of Tokyo
Marek Kowalski	DESY
Manfred Lindner (+)	Max Planck Institute for Nuclear Phys.
Ken Long	Imperial College, London /STFC
Nathalie Palanque-Delabrouille	CEA
Heidi Schellman	Oregon State University
Kate Scholberg	Duke University
Seon-Hee Seo	IBS, Center for Underground Physics
Nigel Smith (+)	SNOLAB
Walter Winter	DESY-Zeuthen
Sam Zeller	Fermilab

(+) Co-chairs

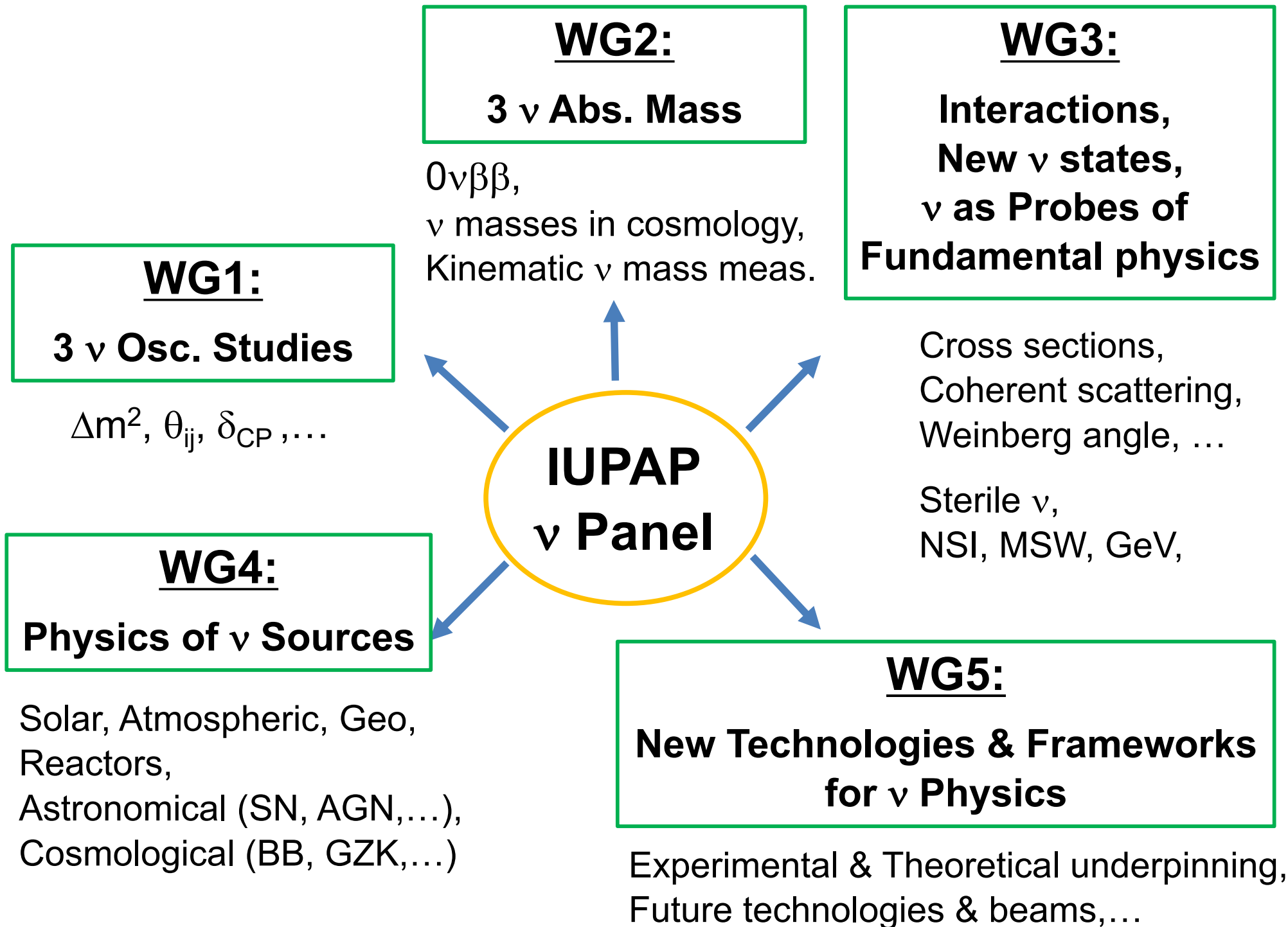
Objectives of IUPAP ν Panel

1. Through consultation w/ the broad neutrino physics community, funding agencies and laboratory management and other stakeholders, the Panel will carry out a review of:

- (a) The **present status** of the global neutrino physics program and the **development** that can be expected on a 5 to 10-year time scale **through a science driven white paper**.
- (b) The **measurements and R&D** (including software development) that are required for the **near-term** (<10 year) and **medium- to long-term** (10-25 year) programs to fulfil their potential.

2. The Panel will identify **opportunities within **neutrino physics**, **mutual benefits** of **global connections** within neutrino physics and other fields, as well as **synergies** of an **international program**.**

3. The Panel will provide **written updates to the C11 Commission at key milestones in its program and a **final report to the IUPAP General Council by October 2020**.**



Working Group Leads

- **WG1:** Ken Long, Jun Cao
- **WG2:** Thomas Brunner, Walter Winter
- **WG3:** Sam Zeller, Mohammad Sajjad Athar
- **WG4:** Sunny Seo, Marek Kowalski
- **WG5:**

There is no WG5 lead.
The Panel will collect topics & discuss, then assign who will write contributions.

Member	WG1: osc.	WG2: mass	WG3: probe	WG4: source	WG5: tech
M. Sajjad Athar	✓		✓		✓
Steve Barwick			✓	✓	✓
Thomas Brunner		✓			✓
Jun Cao	✓			✓	✓
Mikhail Danilov		✓	✓		✓
Renata Zukanovich Funchal	✓		✓		✓
Kunio Inoue		✓			✓
Takaaki Kajita (co-chair)					✓
Marek Kowalski	✓			✓	✓
Manfred Lindner (co-chair)					✓
Kenneth Long	✓		✓		✓
Nathalie Palanque-Delabrouille		✓		✓	✓
Heidi Schellman			✓		✓
Kate Scholberg			✓	✓	✓
Seon-Hee Seo	✓		✓	✓	✓
Nigel Smith (co-chair)					✓
Walter Winter		✓		✓	✓
Sam Zeller	✓		✓		✓

- Five working groups have started their activities.
- White paper framework is ready now.
- We have monthly teleconferences.
- Working groups have started connect to ν community.
- Expect input from neutrino community!
- Contact WG leads for your inputs/suggestions.

<https://www.IUPAPNeutrinoPanel.org/>

(Very early stage of web construction)

**Thank you very much
for your inputs and supports !**