

# Sad News

- We have lost one of the key members of the US MAP effort – *Yuri Alexahin*

From VS:

With heavy heart we convey a sad news that following a massive stroke (deep internal brain damage due to bleeding) Yuri Ivanovich Alexahin has died on September 11<sup>th</sup> in the Central DuPage Hospital (IL, USA). He was 72.

Yuri was an outstanding accelerator scientist, his career spanned more than 40 years with critical contributions to a range of important developments – from collective acceleration methods and the Tau-Charm factory design in Dubna, to LEP luminosity optimization and coherent beam-beam effects theory; from being one of the “Tevatron heroes” who made the Collider Run II luminosity performance a smashing success to key contributions to the design of a practical energy frontier Muon Collider and invention of the helical FOFO-snake muon ionization cooling method, from the pioneering theory and development of the Tevatron electron lenses to deep analysis and experimental studies of beam-beam, space-charge effects and instabilities.

Yuri is survived by his wife Marina and son Vadim.



A funeral and farewell ceremony on Friday, September 18<sup>th</sup>, 2020 between 4 pm -8 pm CST at [Dupage Cremations Memorial Chapel](#) (951 W Washington St, West Chicago, IL 60185).

You can share memories via

<https://memories.net/timeline/yuri-alexahin-85895>

# Accelerator Frontier Working Group 4

## Multi-TeV Colliders

[MULTITEV-SNOWMASS21@fnal.gov](mailto:MULTITEV-SNOWMASS21@fnal.gov)



Mark Palmer

[mpalmer@bnl.gov](mailto:mpalmer@bnl.gov)

Nadia Pastrone

[pastrone@to.infn.it](mailto:pastrone@to.infn.it)



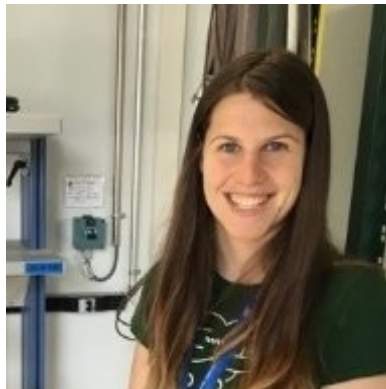
Jingyu Tang

[tangjy@ihep.ac.cn](mailto:tangjy@ihep.ac.cn)



Alexander Valishev

[valishev@fnal.gov](mailto:valishev@fnal.gov)



for the Snowmass Young Accelerator Frontier

Marlene Turner

[marleneturner@lbl.gov](mailto:marleneturner@lbl.gov)

# Machines @ 1-100 TeV Energy Reach, and Beyond...

- This Working Group aims to explore
  - Potential Machine Routes
  - R&D Requirements
  - Potential Readiness Timelines
  - Common Issues at the very high energy scale such as energy efficiency and cost
- It will coordinate with the **Energy Frontier Physics Group** to identify
  - Connections between the physics needs and accelerator types
  - Detailed machine requirements to achieve the community's physics goals

# AF questions

- **acknowledge each submitted LOI** → table – contact before 17/9
- **needs for discussions in your group at the CPM** → yes – 2 h slot
- **needs for discussions with other AF topical groups at the CPM** → yes same slot
  - need a different slot to discuss with EF – what is still to be provided by machine
- **plans for preparatory meetings prior to the CPM** → 1 meeting September 17
- **list of key questions/themes/topics to lump LOIs and your group's work around**

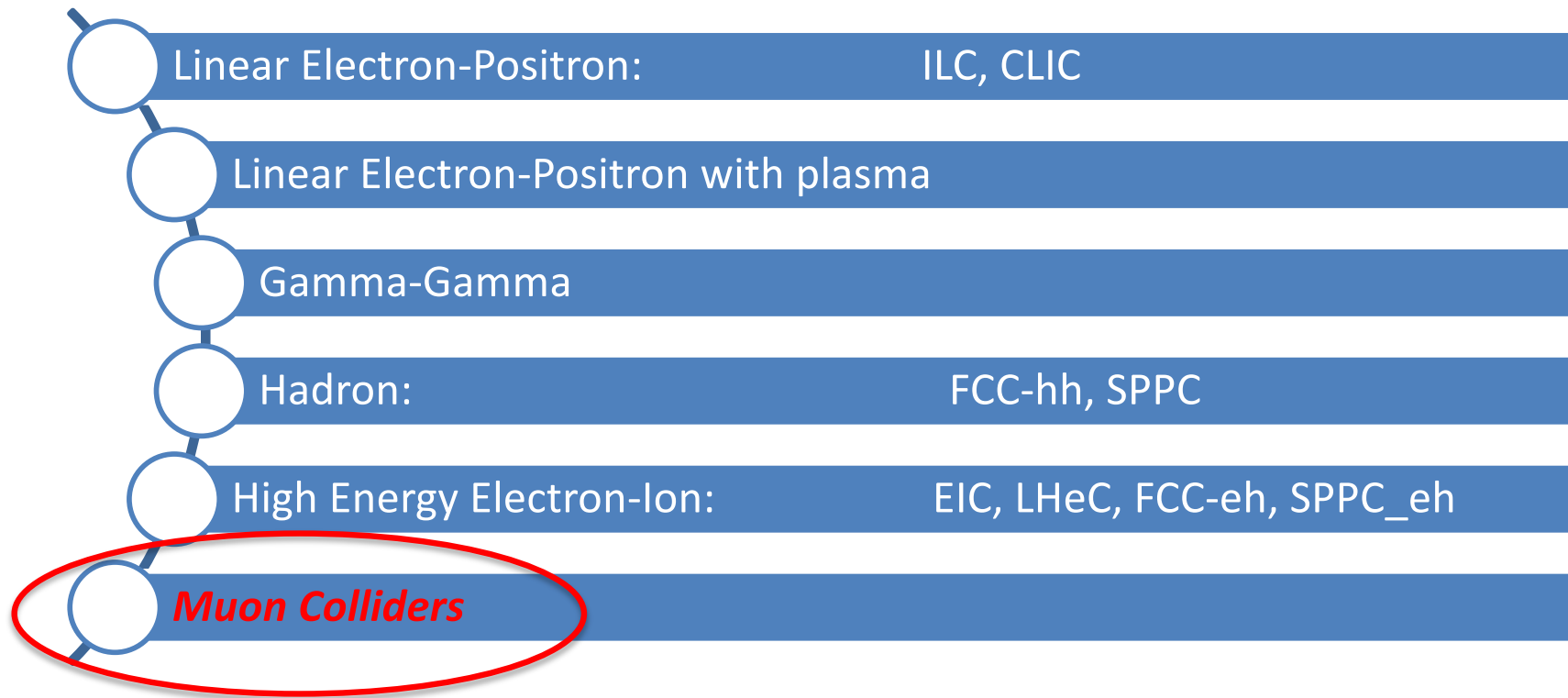
## Focus On:

- Machine concept → a few categories → basic parameters for physics
- Key R&D technologies to deliver a potential future capability

To be investigated further:

Connections of the technology to existing facilities (e.g. to provide potential facility construction and/or R&D pathways)

# Machines with $E_{\text{cm}} \geq 1 \text{ TeV}$ and Collaborations



Other possibilities?

# Plans towards the US CPM

**→ Preparatory Meeting September 17 9:00 am US central**

**<https://indico.fnal.gov/event/45430/>**

- **Currently preparing the AF session layout for the CPM including all joint sessions**

# Snowmass Community Planning Meeting – Virtual October 5-8, 2020 Registration is OPEN

<https://indico.fnal.gov/event/44870/overview>

The screenshot shows a web browser window with the URL [indico.fnal.gov](https://indico.fnal.gov). The page title is "Snowmass Community Planning Meeting - Virtual". The event dates are "5-8 October 2020" and it is "Virtual" in "US/Central timezone".

The page content includes a navigation menu on the left with the following items: Overview, Timetable, Contribution List, Registration, Participant List, Fermilab Statement of Community Standards, Connection Information, Organizing Committees, and Contact. The "Contact" section is highlighted and shows two email addresses: [kiburg@fnal.gov](mailto:kiburg@fnal.gov) and [boj@fnal.gov](mailto:boj@fnal.gov).

The main content area contains the following text:

Over the next year, the U.S. particle physics community will be engaged in Snowmass 2021, an in-depth process to define the most important questions for our field and to identify promising opportunities to address these questions in a global context.

The primary goal of the Community Planning Meeting is **to develop plans and steps to take ("Snowmass Planning") between October 2020 and the Snowmass Community meeting in July 2021, leading to a final report in October 2021.**

Other goals include:

- Inspire the community about the field, and encourage them to engage broadly in the Snowmass process
- Inform the community about plans from other regions and from related fields and planned Snowmass activities
- Listen to the community
- Provide space for members across the field to talk to each other and to discuss, promote, and develop new ideas
- Establish cross working-group connections and identify gaps

We very much look forward to the community's strong participation in the Community Planning Meeting. Any information concerning Snowmass is available at [snowmass21.org](https://snowmass21.org).

Snowmass is an APS process. All participants of the CPM must agree to follow the [APS Code of Conduct](#).

Please note that all times in the timetable are displayed in **US Central Time (UTC-6)**.

# Long Term

- After the CPM, we will coordinate with all LOI teams to discuss final whitepapers to be submitted by:  
***July 31, 2021***