

**A quick reminder...**

# **Focus for Snowmass**

- Define community goals in the next 10, 20, 60 years**
- Where should the community focus R&D efforts?**
- What questions do we want to answer within our lifetimes?**
  - And how do we answer them?**

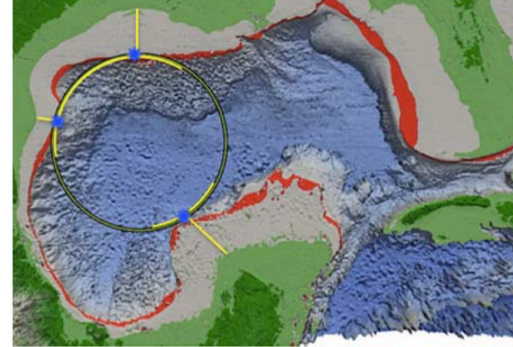


Figure 2: Bathymetry of the Gulf of Mexico, showing potential alignment of a 1,900 km circumference hadron

### Collider in the Sea: Vision for a 500 TeV World Laboratory

Physics  
Potential

e-collider 25 TeV  
 $\mu$ -collider 30 TeV

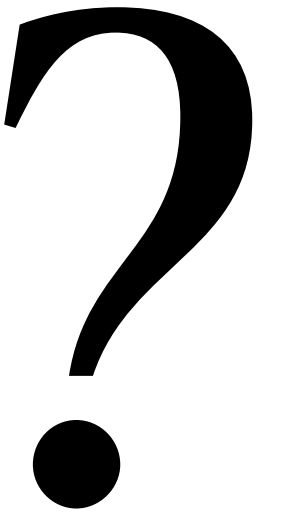
FCC-hh

$\mu$ -collider 14 TeV

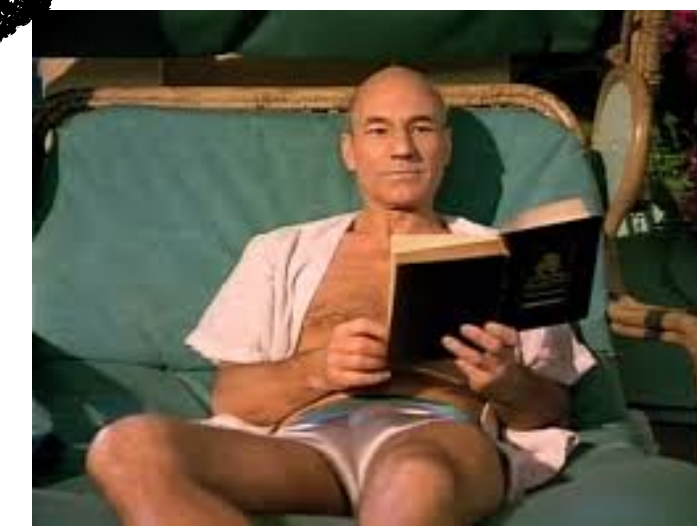
CLIC

FCC-ee ILC

$\mu$ -collider 125



R&D attractiveness



# Planning

Monte Carlo Requests: Please answer the [questionnaire](#)

## "Preparatory joint topical group sessions" - July 7 and July 8, 2020

- Submit abstracts for "short talks" or "offline flash talks"
- Focus is on the review of current activities to identify **emerging topics** and **ideas** which will be the **focus points** for the physics program of the Energy Frontier

**Abstract Submission:** <https://indico.fnal.gov/event/43959/abstracts/>

**Submission  
Deadline  
this Sunday!!**

## "Energy Frontier Workshop" - July 20-22, 2020

- <https://indico.fnal.gov/event/43963>
- Workshop to discuss "**open questions**" and "**new ideas**"
- Develop the focus questions which will **define the strategy and activities of the Energy Frontier during Snowmass 2021**

\* Please note this workshop has been rescheduled from the originally announced dates.



# EF02: Triple Higgs Coupling, Quartic, Quintic + more Higgs Friends



Friday Jun 26, 2020, 1:00 PM → 3:00 PM US/Eastern

1:00 PM

→ 1:05 PM

**Introduction**

⌚ 5m



**Speakers:** Isobel Ojalvo (Princeton University (US)), Patrick Meade (Stony Brook University)

1:10 PM

→ 1:30 PM

**di-Higgs Experimental Results and Projections**

⌚ 20m



**Speaker:** Caterina Vernieri (SLAC)

1:30 PM

→ 1:45 PM

**Recent work for extended Higgs models**

⌚ 15m



**Speakers:** Maxim Perelstein (Cornell University), Shinya Kanemura

1:45 PM

→ 1:55 PM

**Triple Higgs and 2HDM**

⌚ 10m



**Speaker:** Sven Heinemeyer (IFT (CSIC, Madrid))

1:55 PM

→ 2:05 PM

**The Higgs Trilinear Coupling and the Scale of New Physics**

⌚ 10m



**Speakers:** Markus Luty (University of California Davis), Spencer Chang (New York University)

2:05 PM

→ 2:15 PM

**Higgs Quartic at a Muon Collider**

⌚ 10m



**Speakers:** Fabio Maltoni (Universite' catholique de Louvain), Mauro Chiesa

2:15 PM

→ 3:00 PM

**Discussion!**

⌚ 45m

