Snowmass 2021 EF09 - BSM

More general explorations

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https://snowmass21.org/energy/bsm_general

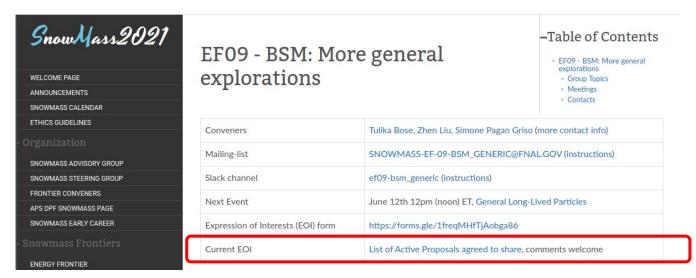


Jun 26th 2020



EF09 Twiki & slack

- Feel free to use our slack channels for informal or overflow discussions!
 - #ef09-bsm_generic
- For useful links / topics, including list of projects that are ongoing (and agreed to be advertised), see our <u>twiki page</u>:



MC Taskforce: how to get started

- MC taskforce twiki page (<u>link</u>) contains information on:
 - o samples from collaborations/study-groups publicly accessible
 - simulation frameworks for various collider options
- Twiki page quickly evolving, watch out for updates coming up soon
 - Reminder: report during upcoming EF workshop in July
- You should have received an email requesting to fill in information on possible common backgrounds that can be centrally simulated (large-stat)
 - https://docs.google.com/forms/d/e/1FAIpQLSfBDI8fy08uli35gLPFYAL2vGRF9YtkApm5i27Z6MCS9FDNXg/viewform?pli=1
 - This is very important even if you only have a rough idea of what could be useful for you, since it allows us to plan for resources needed to generate and store such samples

Upcoming events

- General Energy-Frontier workshop: July 20 July 22
 - First community workshop to discuss open questions and new ideas
 - Developing agenda at https://indico.fnal.gov/event/43963
- Preparatory joint topical group meetings: July 7 July 8
 - BSM session (EF02, EF07, EF08, EF09, EF10) on July 7th afternoon
 - Call for contributions is open
 - Developing agenda at https://indico.fnal.gov/event/43959/overview
- Cross-frontier meeting with EF10, RF6 and AF5: July 15 July 16
 - Will focus on dark sectors and light long-lived particles
 - Generally speaking, light is intended as roughly m < m(B)
 - Will also cover dedicated "external experiments" dedicated to LLP searches in this regime
 - Agenda will be available at https://indico.fnal.gov/event/44030/timetable

Additional events

- Joint EF-AF discussion on energy frontier accelerators
 - Two 3-hours sessions: June 24th, July 1st; both 10:00AM US Eastern time
 - Focus: go over the machine parameters that will become baseline for Snowmass studies
 - June 24th session: https://indico.fnal.gov/event/43871/
 - Covered established collider options: FCCee, CepC, ILC, CLIC, EIC, LHeC, HE-LHC, SppC,& FCChh
 - July 1st session: https://indico.fnal.gov/event/43872/
 - Future machines at initial stages of development: Cold NC-Linear Collider, ERL based FCCee, Gamma-Gamma Higgs factories, Plasma-Laser WFA 1 TeV +, Plasma-Beam WFA 1 TeV +, Structure-beam WFA 1 Tev +, and Muon Coliders: Higgs Factory and 3-14 TeV.

EF09 meetings

- Today's meeting: June 26th
 - Dedicated to New Fermions but also featuring general exploration methods
- No EF09 meeting on July 10th and July 24th
 - several other general or joint Snowmass meetings being organized in July
- Next EF09 meeting on Friday, Aug 7th at 11 EDT
 - We would welcome presentations on topics not covered so far for example heavy sterile neutrinos and heavy neutral leptons
 - Please let us know if you are interested in presenting on these topics (or others)
 - Generally, we'll try to have some focus topic for most of our meetings but we welcome volunteers on ongoing studies and ideas on any EF09 topic to report in the meetings