



Snowmass and Lattice QCD

Level 3 3,000 16 BONUS

p 0/3 n 1/3 Δ 0/2

Level 3 0 18 BONUS

All quarks have a flavor. Yum! Haha, not that kind of flavor.

p 0/3 n 0/3 Δ 0/2

Level 8 24,000 11 BONUS

Σ 4/4 Λ 3/4 Ω 1/4

HUEY-WEN LIN

Snowmass 2013

§ Community Summer Study 2013:

Snowmass on the Mississippi (CSS2013)

↪ <https://inspirehep.net/conferences/1222762>

↪ 3 frontiers

↪ Energy Frontier

↪ Intensity Frontier

↪ Cosmic Frontier

Snowmass 2021

§ 10 frontiers

§ Lattice Frontier Conveners

↻ Theory Frontier: Aida El-Khadra

↻ Computational Frontier: Steven Gottlieb

§ Lattice Topical-Group Conveners

↻ Energy

↻ EF06: QCD and strong interactions: Hadronic structure and forward QCD
Huey-Wen Lin

↻ EF07: QCD and strong interactions: Heavy Ions
Swagato Mukerjee

↻ Rare Processes and Precision

↻ RF01: Weak decays of b and c quarks
Stefan Meinel

↻ RF03: Fundamental physics in small experiments
Tom Blum

Snowmass 2021

§ (Cont.) Lattice Topical Group Conveners

∞ Theory

- ∞ TF05: Lattice gauge theory
[Zohreh Davoudi](#), [Taku Izubuchi](#), [Ethan Neil](#)
- ∞ TF10: Quantum Information Science
[Simon Catterall](#)

∞ Computational

- ∞ CompF2: Theoretical Calculations and Simulation
[Peter Boyle](#)
- ∞ CompF3: Machine Learning
[Phiala Shanahan](#)
- ∞ CompF6: Quantum computing
[Martin Savage](#)

Email by Steve: “[latticenews-l] Snowmass 2021 Planning Activity”

Snowmass 2021

§ Important website: <https://snowmass21.org/>

§ Snowmass Town Hall Meeting

‣ <https://indico.fnal.gov/event/23601/>

§ Agendas and presentations of all Snowmass-related meetings are available via [this Snowmass Indico link](#)

Community Contribution

- Letters of Interest (submission : April 1, 2020 – August 31, 2020)
 - Allow conveners to see what proposals to expect and to encourage the community to begin studying them. Help conveners to prepare the Snowmass Planning Meeting (Nov. 4 - 6, 2020 at Fermilab).
 - Letters should give brief descriptions and cite the relevant papers to study.
 - Submission instructions: <https://snowmass21.org/loi>
 - Authors are encouraged to submit a full writeup as a contributed paper
- Contributed Papers (submission : April 1, 2020 – July 31, 2021)
 - Part of the Snowmass proceedings.
 - White papers on specific scientific areas, technical articles presenting new results on relevant physics topics, and reasoned expressions of physics priorities, including those related to community involvement.
 - These papers and discussions throughout the Snowmass process will help shape the long-term strategy of particle physics in the U.S. Contributed papers will remain part of the permanent record of Snowmass 2021.
 - Submission instructions: <https://snowmass21.org/submissions/>.