Thanks for organizing the discussion:

- Where do we see new physics coming?
- What is the dream case?
- What's the machine needed for the dream case?
- What is the nightmare scenario?
- Where can we hope to make a breakthrough if we are in the nightmare scenario?

Snowmass goals:

"… define the most important questions for the field of particle physics and identify promising opportunities to address them."

- **Where do we see new physics coming?**

HEP is at crossroads!

Good news: The SM is experimentally tested to a high precision. It can be valid to an exponentially high scale, even to M_{PL} !

Challenge: No clear argument for the next physics scale.

Opportunity: there are important/urgent questions:
The nature of EWSB; stabilizing M_H & the EW scale; dark matter; neutrino mass; baryo-antibaryon asymmetry …

"When you come to a fork in the road, take it!" – Yogi Berra

We must explore all directions.

- **What is the dream case?**
- **What's the machine needed for the dream case?**

My take: HL-LHC or the muC/Fcc open a new physics threshold; or a Higgs factory observes deviations from the SM; consistent with low-energy observations and DM detection.

→ Advance towards: addressing the important questions, and to new directions.

- **What is the nightmare scenario?**
- **Where can we hope to make a breakthrough if we are in the nightmare scenario?**

My take: Not (yet) seeing anything from HL-LHC, DM detection, flavor / HyperK / DUNE for BSM physics …

But! This is not a failure, rather achievements!

→ New ideas (broad DM search …), new technologies for precision physics and energy frontier colliders.

We will continue to understand Nature to a deeper level!

Snowmass explores the road map for the future.