

P5 Town Hall at SLAC



Contribution ID: 49

Type: **Early Career Scientist**

Near term applications driven by advanced accelerator concepts en route towards high energy physics deployment

Thursday, 4 May 2023 15:25 (5 minutes)

While the long-term vision of the advanced accelerator community is aimed at addressing the challenges of future collider technology, it is critical that the community takes advantage of the opportunity to make large societal impact through its near-term applications. In turn, enabling robust applications strengthens the quality, control, and reliability of the underlying accelerator infrastructure. A successful near-term application environment will naturally guide particle accelerator technology to maturity. This contribution summarizes a selection of key near-term applications that are, or will be, enabled by advanced accelerator concepts in the next 5-10 years. These exciting developments include the first demonstrations of plasma FEL lasing, the generation of extremely compressed electron beams, particle physics beamdump experiments and medical applications, among others.

Primary author: EMMA, Claudio (SLAC)

Presenter: EMMA, Claudio (SLAC)

Session Classification: Contributed Remarks