

## Using Foams for Ultra-Low Mass Vertex Detectors

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Carbon and ceramic foams have the potential to be used as structural supports for thinned silicon pixel detectors to create ultra-low mass detector modules. They are easy to handle, have a high-specific stiffness, and good thermal and other properties. I will describe a programme of R&D using this concept carried out by the LCFI, LowMass and PLUME collaborations towards modules for vertex detectors at future colliders. These designs have achieved material budgets of  $\sim 0.1\%X_0$  (single-sided modules) and  $\sim 0.3\%X_0$  (double-sided modules).

### Summary

**Presenter:** GOLDSTEIN, Joel (University of Bristol (GB))