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Additives manufacturing of scintillators: Status and Opportunities

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Advances in additive manufacturing (AM) techniques, such as 3D printing, can provide an attractive solution for addressing the instrumentation needs for the next generation of HEP experiments. Benefits of AM methods include production of low radioactivity components as well as enabling new geometries and multi-material compositions. These simples to highly complex geometries may be impossible to produce using conventional techniques. In this talk, I will provide an overview of 3D printing techniques used for preparation of organic scintillator which may find future uses in HEP experiments. Results from high spatial resolution light-based 3D printing of scintillators as well as opportunities for new formulations and novel materials will be discussed.

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