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## Silicon pixel R&D for CLIC

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The physics aims at the proposed future CLIC high-energy linear  $e+e-$  collider pose challenging demands on the performance of the vertex and tracking detector system. In particular the detectors have to be well adapted to the experimental conditions, such as the time structure of the collisions and the presence of beam-induced backgrounds. The requirements include ultra-low mass, facilitated by power pulsing and air cooling in the vertex-detector region, small cell sizes and precision hit timing at the few-ns level. A highly granular all-silicon vertex and tracking detector system is under development, following an integrated approach addressing simultaneously the physics requirements and engineering constraints. We present the proposed detector system, and give an overview of the ongoing technology R&D, including results from recent beam tests of fine-pitch silicon pixel detector prototypes.

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