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## **【386】 A Thin Time-of-flight PET scanner based on fast monolithic silicon pixel detectors**

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The goal of the TT-PET project is to develop a compact Time-of-flight PET scanner with 30 ps time resolution, capable to stand high magnetic fields and to be integrated in traditional MRI scanners.

The TT-PET scan can achieve its very precise timing thanks to SiGe amplifiers, which are embedded in monolithic silicon sensors, which substitute the traditional high density crystals.

The scanner will be composed of 16 detection towers arranged in a ring structure. A Tower is composed of 60 modules stacked on top of each other.

A general overview of the project and readout DAQ, with its trigger system will be presented.

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