Test and characterisation of SiPMs for the MEG high resolution timing counter

- $\mu^+ \rightarrow e^+ \gamma$ is a forbidden decay in the Standard Model (SM): its discovery would open a door to new physics beyond the SM. It is predicted by supersymmetric theories.

- The MEG Timing Counter (TC) will measure the positron time of arrival with a resolution of 30 ps, thus improving by 1 order of magnitude the existing limit.

- Countries

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- Each TC's pixel is made of a plastic scintillator and of 6 SiPMs attached at both sides.

- 4000 SiPMs have been tested and their breakdown voltage and gain have been measured.