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The VSIPMT project

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The VSIPMT (Vacuum Silicon PhotoMultiplier Tube) is an innovative design for a revolutionary hybrid photodetector.

The idea, born with the purpose to use a SiPM for large detection volumes, consists in replacing the classical dynode chain with a SiPM.

In this configuration, we match the large sensitive area of a photocathode with the performances of the SiPM technology,

which therefore acts like an electron detector and so like a current amplifier.

The excellent photon counting capability, fast response, low power consumption and great stability are among the most attractive features of the

VSIPMT. We now present the results of a full characterization of the VSIPMT industrial prototypes with their pro and contra and the preliminary tests we are

performing to improve the VSIPMT features and the progress in the realization of a 2-inches and 3-inches VSIPMT prototype

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