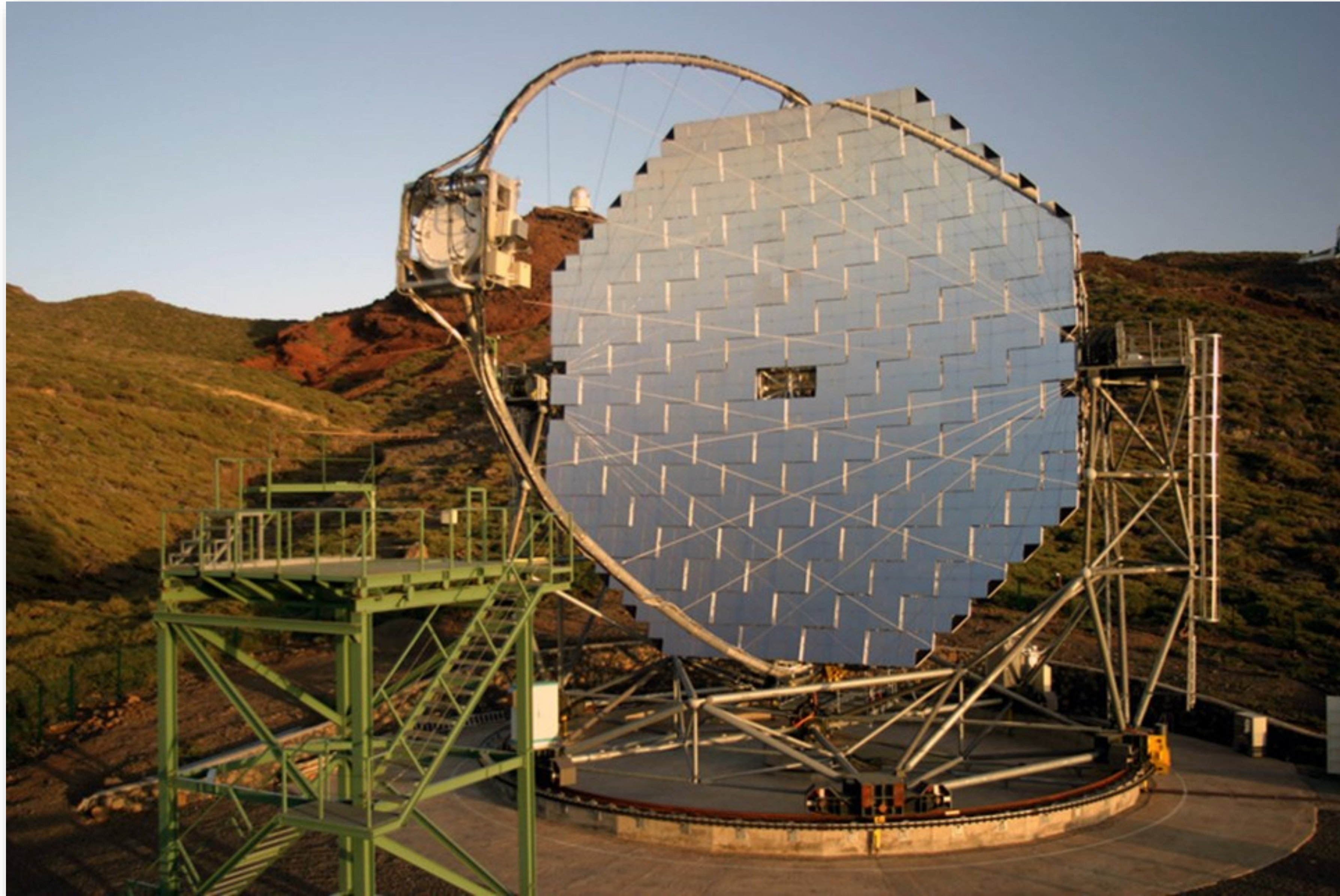
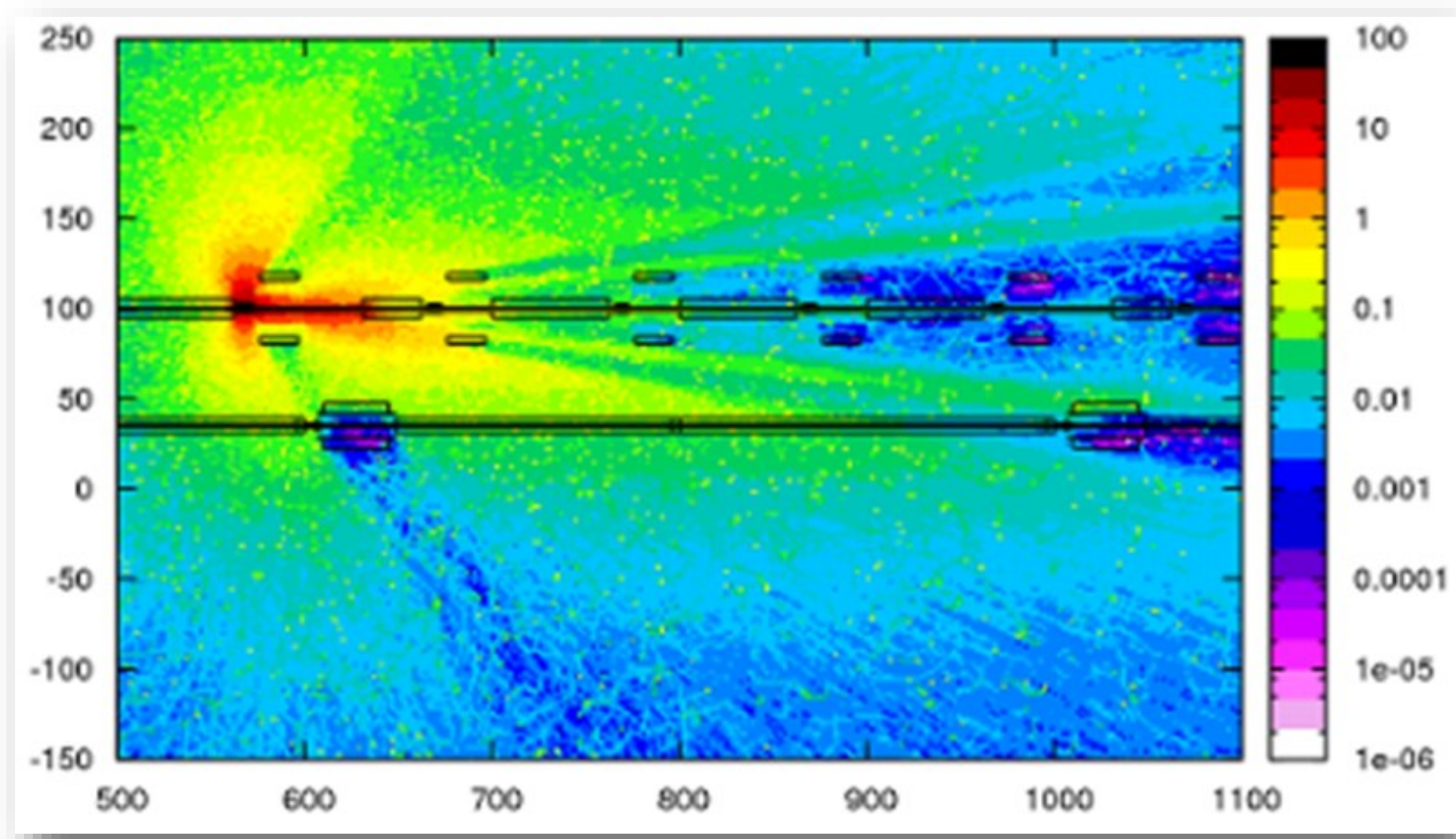


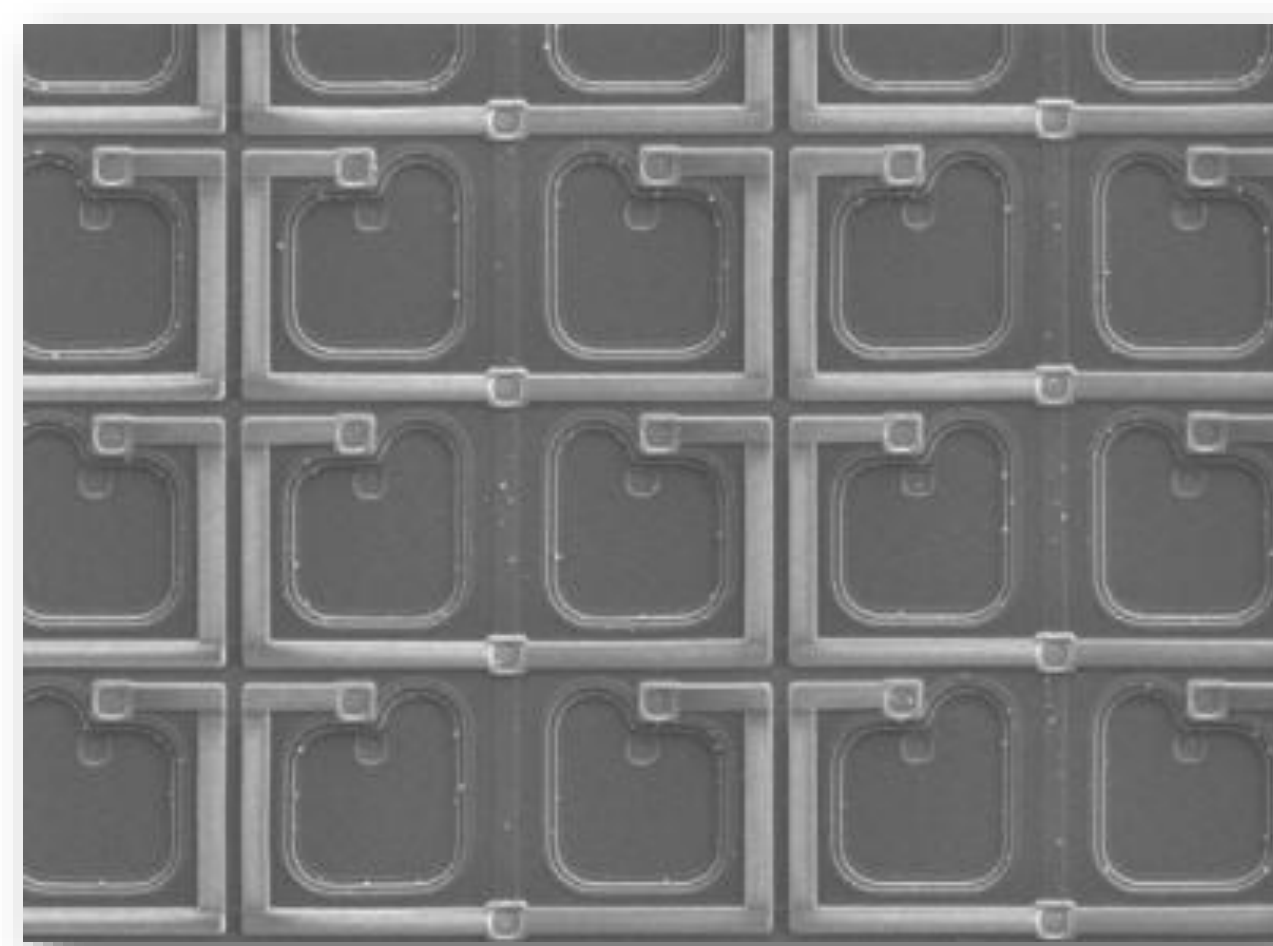
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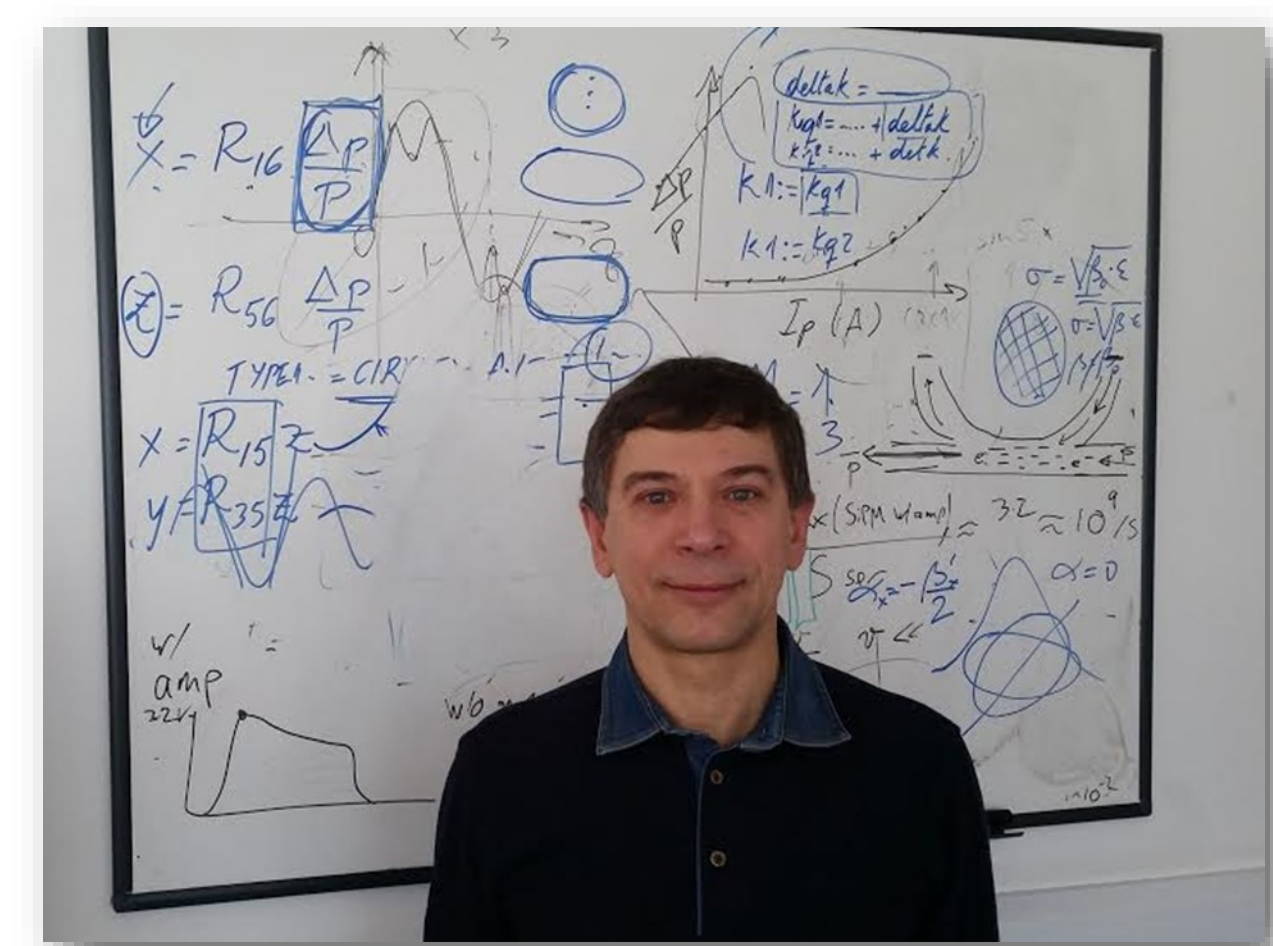
2



3



4



1

SiPM Applications

Silicon photomultipliers (SiPMs) find widespread use in R&D due to their compactness, robustness and superior detection properties. This includes projects like Cherenkov Telescope Array (CTA).

In order to fully understand their behaviour, detailed mathematical models that can adequately describe their response to different light signals, dark current and detector deadtime were required.

Their development was the primary aim of the SiPM project between 2013-2015.

2

Beam Loss Monitors

Optical beam loss monitors using SiPMs were studied as part of the project in collaboration with CERN and the Australian Synchrotron. Superior time and spatial resolution were successfully demonstrated in experiments.

3

Technology Limits

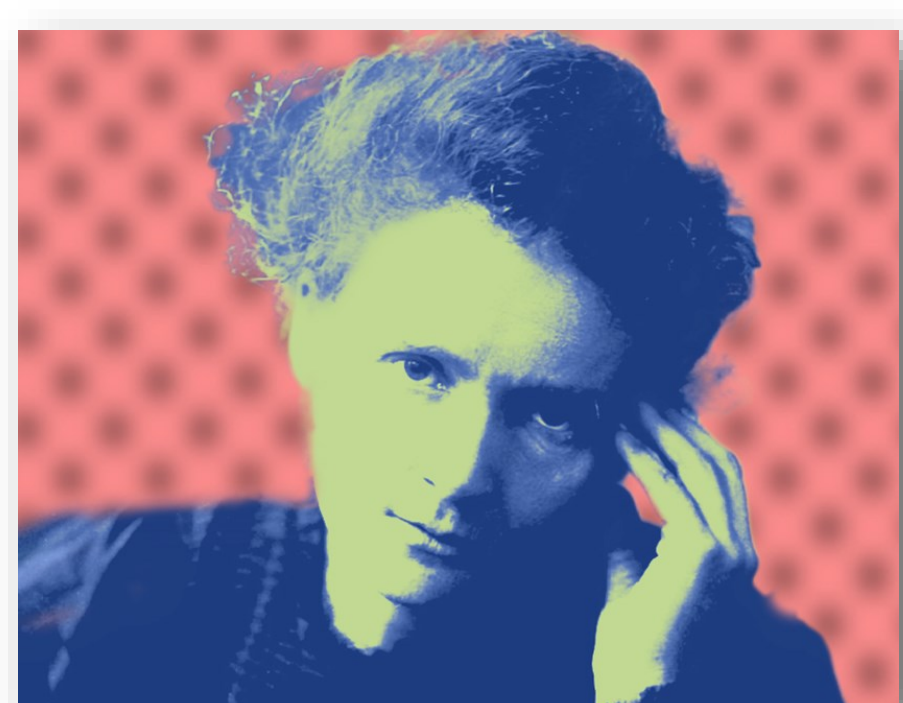
Probabilistic models to describe SiPM characteristics were developed. This helped understand SiPM limits better and optimize their use for various applications.

4

Dr Sergey Vinogradov

Dr Vinogradov studied many different SiPM applications during his time in the QUASAR Group at the University of Liverpool. He gave invited talks at institutions across Europe and also published more than 10 papers.

The quality of the R&D he carried out during his Marie Curie Fellowship was recognized with the award of IEEE Senior membership in 2015. Optical diagnostics remains a key area of Liverpool accelerator research.



<http://www.marie-curie-day-2017.org>

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