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【208】 POSiCS a handable gamma-camera for radio-guided surgery

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At the frontier between research and innovation, POSiCS is a project aiming to build a scalable and handable gamma-camera for Radio-Guided Surgeries. Targeting the imaging of lymph nodes for biopsies in the context of breast cancer and cutaneous melanoma, the camera aims at reducing the invasiveness of the surgical procedure while improving the surgery success probability. The camera is based on an innovative position-sensitive SiPM with reduced number of channels over a large area. We use Deep Neural Networks to enhance the resolution of the gamma-camera yielding an increase in the number of distinguishable regions by a factor 10. The device performances and its use-case will be presented.

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