

## Multispectral Photon-counting for Medical Imaging and Beam characterization (MPMIB)

- Panja-Riina Luukka, University of Helsinki
- Teemu Siiskonen, Radiation and Nuclear Safety Authority (STUK)
- Simo Särkkä, Aalto University
- Tuure Tuuva, Lappeenranta University of Technology



**RADESS** The aim of this project is to develop a next-generation medical imaging detecting system, capable of multispectral imaging. Such a detector system will fundamentally change the way how imaging is done in medical and industrial applications. Our approach is to employ a direct detection system based on photon counting, which would open possibilities for new diagnostic procedures due to the superior efficiency, contrast, image quality and lower patient dose.