

Announcement of the forthcoming SyneRBI PET Rapid Image Reconstruction Challenge

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The Collaborative Computational Platform for Synergistic Reconstruction for Biomedical Imaging (<https://www.ccpsynerbi.ac.uk/>) is organising an open challenge for fast reconstruction of PET data with a given MAP objective function. Its primary aim is to stimulate research for the development of fast PET image reconstruction algorithms applicable to real world data. Motivated by the success of the clinical translation of regularised image reconstruction in PET and other modalities, the challenge will focus on a smoothed version of the relative difference prior. The participants will have access to a set of phantom data acquired on a range of clinical scanners. The main task for the participants of the challenge will be to reach a solution which is close to a target image (e.g. in terms of mean ROI SUV) as quickly as possible (as measured in terms of computation time). Open-source software (SIRF, STIR, CIL) will be provided to develop and test the algorithms. In this talk, I will describe the challenge, as a final opportunity for the community to provide feedback on its organisation.

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Session Classification: Special Track on Image reconstruction