

Recent development of PET technique and its applications

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Positron Emission Tomography has established itself as medical imaging technique since the early 90s mainly for oncology applications for diagnosis, staging and prognosis of cancer lesions. With the advent of molecular medicine, PET had an impressive technological development in order to provide the benefits of spatial resolution and sensitivity that were required. This presentation will illustrate the current technologies and applications of preclinical PET and PET/CT imaging, imaging of specific organs and as an essential component of treatment plans in radiotherapy and hadron therapy. Finally there will be illustrated the new scenario of hybrid PET-MR machines that are entering preclinical and clinical research.
