

13th Beam Telescopes and Test Beams Workshop



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Medical application research in the IRIS group at IFIC

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Nuclear medicine is a branch of medicine that uses radiation to diagnose and treat diseases, one of the most representative being cancer. Although scanners for medical imaging are used daily, there is still room for improvement in terms of energy, spatial and timing resolutions. At the same time, regarding cancer treatment, in the last years hadrontherapy is becoming a key technique in radiation oncology due to the characteristics of its energy deposition compared with photons. The drawback of this technique is the difficulty of dose deposition monitoring, because the radiation used for treatment does not exit the patient's body, unlike photons.

In this contribution, we will present a short overview of nuclear medicine techniques and the different research lines in the IRIS group, including PET, protontherapy monitoring, and imaging of targeted alphatherapy.

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