

# TIPP 2011 - 2nd International Conference on Technology and Instrumentation in Particle Physics



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## TIPP for Medical Applications

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Ever since Roentgen took an X-ray image of his wife's hand soon after his discovery of this new electromagnetic (EM) radiation, technology and instrumentation in particle physics (TIPP) have been closely tied to the advances made in the world of medicine. A variety of TIPP associated with a large number of selected wave bands spanning the entire EM spectrum have been instrumental in developing novel imaging devices and technologies that were critically important in introducing the disruptive advances made in improving medical diagnosis and image-guided treatment planning and therapy. TIPP was also the central core of the creation of the medical practice of radiation therapy. Today, leading-edge TIPP developments in photo-detectors and fast electronics are also the driving force behind many innovations in numerous medical applications. We will review some of the most critical TIPP advances that are spearheading the next-generation medical imaging and therapeutic applications.

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