

PROSAS-CNA: A proton accelerator for cancer therapy and research

SY06-03

J. Gomez Camacho^I, M.I. Gallardo^{II}, E. Bayo^{III}, R. Arrans^{III}, C. Sanchez Angulo^I

^ICNA, Seville, Spain, ^{II}Universidad de Sevilla, Sevilla, Spain, ^{III}SAS, Sevilla, Spain

The andalusian health service (SAS) and the spanish National Accelerator Centre (CNA) promote the installation of a proton accelerator, with an energy of about 250 MeV, to treat different types of Cancer, using the technique known as Proton Therapy. Proton Therapy is based on the physical properties of protons. When they go through biological media, they deposit most of their energy at a given depth, which is determined by the incident beam energy. This is known as the Bragg peak. The status of the project, the medical and technological applications, as well as the opportunities that it opens in radiobiology, will be presented.