

Abstract Submitted
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Feasibility Study Of Kaon Therapy SOLOMON SAHLE, Hampton University, FOR CAMI COLLABORATION — Proton therapy is a new emerging radiation modality that supersedes electron machines for cancer treatments. The strength of these beams lies in their Bragg peak distribution that allows sparing healthy tissues while depositing the majority of the dose at the (targeted) tumor location. Although promising, there are still unresolved issues with this technique due to the impossibility of viewing the beam within a patient and the production of low energy neutrons at the end of the distribution. Simulation studies on the use of kaon beams were made using the Geant4 toolkit. The strangeness content of these particles permits to extract the spatial beam information in-vivo, as well as providing a similar Bragg distribution as protons. We will discuss the impact of such beams for hadron therapy in cancer treatments.

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