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Medical Physics as a Career for Astrophysicists CHRISTOPHER

WILLIAMS, Brigham and Women's Hospital — On the surface, medical physics and astrophysics may seem like completely unrelated disciplines. However, the skills and technical knowledge developed through studying astrophysics often have a surprisingly direct application to medical imaging and the use of radiation to treat disease. For astrophysicists who are considering different career paths, medical physics provides an opportunity to use their background to develop new ways of treating disease as well as directly participating in clinical patient care. In this presentation I will discuss the challenges and opportunities for astrophysicists who are considering switching to the medical physics field. I will discuss the varying roles that medical physicists play, both in research and clinical care. I will discuss my career path as an example, starting from my PhD in astrophysics focusing on radio instrumentation and early universe cosmology, through my current position as a medical physicist where I develop new imaging techniques for guiding radiation therapy and help to deliver these treatments to cancer patients.

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