



Contribution ID: 173

Type: **Panel Discussion**

## Physicists' Roles in Medicine

*Wednesday, 26 August 2015 11:00 (10 minutes)*

Not many people know a field called “medical physics” and there are physicists working in hospitals. The roles of physicists in medicine include: (1) developing x-ray images for disease diagnosis; (2) ensuring radiation safety for patients and hospital workers; (3) ensuring accurate and precise radiation therapy delivery. X-ray has been used in medicine since its discovery more than one hundred years ago. In imaging, medical physicists use x-ray to construct three dimensional anatomic images, assisting physician to see the internal anatomy of a patient without cutting the patient open. In therapy, medical physicists ensure the powerful x-ray aim toward to cancer site, killing the cancer cells. With these medical applications, medical physicists apply their knowledge in nuclear physics and modern physics to play the essential roles. In this presentation, we will show some examples of specific physicist's roles in medicine.

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**Session Classification:** Session 6: Use of Radiation in Medicine