



**UNIVERSITÀ
DEGLI STUDI
DI TRIESTE**



The Abdus Salam
**International Centre
for Theoretical Physics**



Master's of Advanced Studies in Medical Physics

AI in medical imaging: from scan planning to report generation

Abstract:

The AI boom in the last 10 years largely builds on the early success of deep convolutional neural networks (CNNs) in image classification. In healthcare, diagnostic imaging has thus logically been one of the early adopters of the newly developed technologies. Beyond image classification for automated diagnosis, CNNs and their offsprings have successfully been applied to different steps of the image production chain such as system calibration, image reconstruction and image denoising. The use of AI also promises to alleviate different bottlenecks in the imaging workflow, with the aim of reducing misdiagnosis and staff workload while increasing patient throughput. This seminar will give an overview of some of these current and potential applications of AI in medical imaging. The focus will be on general principles and achieved benefits rather than on the technical aspects of deep learning.

Location: International Centre for Theoretical Physics (ICTP)

Room: Leonardo Building - Luigi Stasi Seminar Room (First Floor)

10 December 2024 at 11:30 am

Or via zoom:

ID: 970 9571 9958

PSW: 082024

Link: <https://zoom.us/j/97095719958>