

An Overview of the Applications of Artificial Intelligence (AI) in Radiation Protection

Monday, 4 November 2024 15:00 (15 minutes)

This overview of the applications of Artificial Intelligence (AI) in radiation protection is based on materials from the Workshop on “Artificial Intelligence and Radiation Protection,” held in April 2024 in Greece. The workshop was organized as part of the PIANOFORTE research partnership in collaboration with the NERIS platform. During the workshop, AI applications were discussed across various fields, including dosimetry, medical physics, radiobiology, emergency preparedness, radioecology, and others.

This study focuses on selected AI applications relevant to radiation protection. The study summarizes available findings, highlighting both the advantages and limitations of AI. Additionally, the study addresses challenges associated with AI implementation and shares experiences from users in scientific, academic, and commercial sectors.

The presentation is prepared based on the research project of the Ministry of the Interior of Czechia „Improvement and development of tools, capabilities and skills in order to ensure effective management of the response to a radiation accident in all phases, taking into account the requirements of the National Radiation Emergency Plan of the CR“(ID:VC20232025007).

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