



Joint Symposium 4

AI Committee / EFOMP / SIIM / IEEE

Monday, October 6, 15:00 – 16:30

Session Title

Trustful AI in the Clinics

Chairpersons

Efi Koutsouveli (Athens, Greece)

Dimitris Visvikis (Brest, France)

Programme

15:00 – 15:30 **Selina Zipponi** (Padova, Italy): Ethical AI and the EU AI Act

15:30 – 16:00 **Mathieu Hatt** (Brest, France): Explainable AI for NM

16:00 – 16:30 **Oliver Diaz** (Barcelona, Spain): Trustworthy image processing with AI

Educational Objectives

1. Learn about the legal framework for AI regulation in the EU
2. Learn the state of the art in the field of explainable and trustworthy AI

Summary

The development of artificial intelligence (AI) in the field of medicine has led to numerous commercial solutions which are rapidly finding their way into clinical practice. In parallel there is an increasing demand from potential users of AI in clinical practice for the development of more explainable and trustworthy models. These two aspects will facilitate the adoption of the proposed solutions and allow a more transparent usage not only for the hospital personnel but also for the patients. Similarly, medical physicists are working on the development of protocols for acceptance testing and continuous quality control of AI software solutions finding their way into clinical practice. More recently a legal framework concerning the use of AI has been voted by the EU parliament and will be translated into legislation in the EU countries. We are therefore in crossroads both in terms of the increasing adoption of AI models in clinical practice but also their regulation throughout their lifecycle similarly to any other medical device used in clinical practice. This session will shed light in all of these aspects and provide the current state of the art in the field.

Key Words

EU AI act; Ethical AI; Explainable AI; Trustworthy AI