

# Introduction to Medical Physics program of Shkodra workshop (6-8 October 2014)

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Medical Physics program begins with a review of recent advances in medical imaging given by the Medical Physics Convener, Yves LEMOIGNE, before treating three points:

- The first (and main area) is Ultrasound Imaging that is recognized as inexpensive compared to other imaging techniques and that has made dramatic progress in recent years (3D images, functional imaging, and even the possibility of Ultrasound Therapy ).

Christian CACHARD presents the basics of ultrasound technology and more advanced developments (contrasts agents, non linear multipulses, Doppler techniques...).

Hervé LIEBGOTT presents operation of ultrasound transducers and ultrasound applications in 3D imaging as well as intravascular ultrasound. Hervé ends with pictures of very promising advanced techniques in ultrasound.

In a return to other imaging methods, Kiriaki THEODOROU explains the principles of magnetic resonance imaging with emphasis on the power of this tool in a magnetic resonance spectroscopy method (help to diagnosis).

- The second area includes the progresses in Hadrontherapy first with Palma ALTIERI which its principles and results, then Kiriaki THEODOROU explains the Greek Hadrontherapy project and its justification.

- The third area concerns the role of Medical Physics at the university and the hospital. Daniela MILADINOVA gives her experience in Macedonia (Skopje) both in academia and in the public hospital, while Sonja PETKOVSKA gives her experience in a private hospital focusing on the role that the medical physicist must keep.

- The Convener concludes with his Summary talk where he is trying to underline what more important points have been learned.

Many thanks to the Medical Physics team whose photos are added on the right...

