

Microwave Imaging for Medical Diagnostics **Panagiotis Kosmas^{1,2}**

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Abstract

The talk will briefly introduce the principles of medical microwave imaging (MWI) and then review recent progress from Dr Kosmas' team on the development and validation of this technique for brain imaging. This will include a study on the impact of using a metasurface to enhance signal penetration as well as a comparison of two-dimensional and three-dimensional tomographic approaches. Results from complex numerical and experimental phantoms will examine the impact of critical MWI aspects such as prior information.