High Frame Rate Imaging - A New Way of Assessing Blood Flow and Myocardial Mechanics With Echocardiography

Prof. Dr. med. Jens-Uwe Voigt
Medical Imaging Research Center, Department of Cardiovascular Diseases, University Hospitals Leuven, Belgium

Plane-wave- and diverging-wave-imaging with frame rates of up to 5000 frames per second are the new buzz words in the world of echocardiography. Although theoretically discussed by physicists for many years, only latest transducer technology and powerful post-processing computers made them become practically possible. Such high temporal resolution allows completely new approaches to assess blood flow and myocardial function. E.g., shear waves, subtle vibrations in the myocardium, can be visualized and evaluated in order assess mechanical properties of the myocardium in a way that was not possible before. In this lecture, Prof Voigt will introduce the concepts behind this new and still experimental method, present the current state of its development and share first practical experience form animal experiments and early patient studies.

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Bibliothek at DHZB
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Prof. Dr. med. Burkert Pieske
Klinik für Innere Medizin
m.S. Kardiologie
Charité Universitätsmedizin Berlin
– Campus Virchow Klinik
Klinik für Innere Medizin – Kardiologie

Prof. Dr. med. Philipp Stawowy
Klinik für Innere Medizin
und Kardiologie
Deutsches Herzzentrum Berlin

Prof. Dr. med. Frank R. Heinzel
Dr. Paulina Wakula PhD
Klinik für Innere Medizin
m.S. Kardiologie
Charité Universitätsmedizin Berlin
Campus Virchow Klinik
Correspondence to:
frank.heinzel@charite.de