CHARITÉ
UNIVERSITÄTSMEDIZIN BERLIN
Campus Virchow Klinik

DEUTSCHES HERZZENTRUM BERLIN®
STIFTUNG DES BÜRGERLICHEN RECHTS

Cardiology Science Lunch Berlin

a weekly exchange of insights and ideas in cardiovascular medicine

Computing the Heart Beat : The Role of Computer Models in Basic Research and Clinical Applications

Prof. Gernot Plank

Institute of Biophysics, Medical University of Graz, Austria

Despite the overwhelming wealth of biological and clinical data available in the post-genomic era, gaining mechanistic insight into cardiac function remains to be a challenge. Computational models are increasingly considered as a powerful adjunct to harness these data, thus allowing the quantitative observation of cause-effect relationship at a level of biophysical detail not achievable with experimental techniques alone.

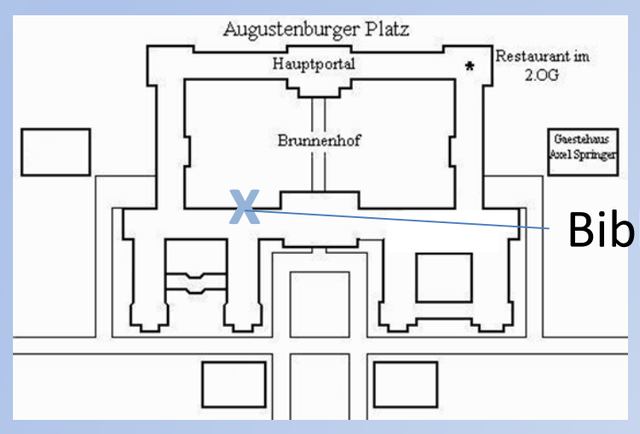
An overview of capabilities and limitations of state of the art organ scale computer models of cardiac electro-mechanics will be given and selected concurrent modeling applications in basic research (impaired calcium handling and metabolism in arrhythmogenesis) and clinical research (patient-specific therapeutic optimization) will be discussed.

Wednesday, 04.11.2015

12:00 – 13:00h

Bibliothek at DHZB

Augustenburger Platz 1, Berlin



Priv. Doz Dr. Dr. med. Frank R. Heinzel
Priv. Doz Dr. med. Florian Blaschke
Klinik für Innere Medizin
m.S. Kardiologie
Charité Universitätsmedizin Berlin
Campus Virchow Klinik

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

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

und Deutsches Herzzentrum Berlin
Klinik für Innere Medizin –
Kardiologie

Correspondence for **Cardiology Science Lunch Berlin** to: frank.heinzel@charite.de

The following CSLB is on 18.11.2015.

Cardiology Science Lunch Berlin is supported by an unrestricted educational grant from Servier Deutschland GmbH

SERVIER