Provisional program at Artimino conference on Medical Ultrasound

Updated June 4, 2015

9 sessions
All sessions have a length of 2 hours
Two sessions chairs
One chair has 15 minutes intro including discussion if marked in bold
5' talk + 5' discussion all others if not otherwise stated

Sunday

Session I	**3D vector flow imaging and applications**
Session chairs	Tomas Jansson + Lasse Løvstakken
Responsible	Jørgen AV responsible Tobias + John

Lasse Løvstakken	**3D Cardiac Flow Imaging**
Andreas Hjelm Brandt	Evaluation of dialysis patients using vector flow imaging
Abigail Swillens	Advanced biomechanical modeling for the development of cardiovascular ultrasound imaging
Jacob Bjerring Olesen	Pressure gradient estimation
Hans Torp	Beamforming for vector flow imaging
Anne Saris	Adapted beamforming for robust blood vector velocity imaging
Hamed Bouzari + Simon Holbek	3D imaging and 3-D vector velocity imaging with a row-column array
Morten Smedsrud Wigen	3D vector flow imaging
Pedro Santos	Tissue Doppler imaging using a sub-aperture beam forming system

Monday

Session II	**Plane wave and SA imaging: Use and optimization**
Session chairs	Herve Liebgott + Jørgen Arendt Jensen
Responsible	Jørgen AV responsible Jacob + Simon

Nick Bottenus	Large swept synthetic aperture imaging
Deep Bera	Synthetic aperture sequential beamforming for phased array imaging
Hong Liang Li	Estimation of lateral deformation components using plane wave imaging and transverse oscillation
Martin Hemmsen	Dual stage SA imaging
Herve Liebgott	Fair comparison of imaging schemes
Jonas Jensen + Matthias Bo Stuart	Optimization of plane wave imaging
Charles Tremblay-Darveau	Contrast enhanced Doppler imaging with plane waves
Meng-Xing Tang	High-frame rate contrast enhanced ultrasound imaging of flow and perfusion
Billy Y. S. Yu	High frame rate flow imaging
Julian Garcia-Duitama	BSC estimation of anisotropic tissues using plane wave imaging

Session III	**Synthetic aperture and plane wave vector flow imaging**
Session chairs	Damien Garcia + Guy Cloutier
Responsible	Jørgen AV responsible Maria + Matthias

Thomas Deffieux	**Fast plane wave flow imaging**
Carlos A. V. Hoyos	High dynamic range SA VFI
Ingvid Kinn Ekroll	Motion correction in coherent compunding Doppler imaging
Julia Faurie	Intraventricular Doppler vortography using ultrafast ultrasound
Damien Garcia	Multiple-PRF fast color Doppler
Solveig Fadnes	Plane wave imaging of congential heart defects from fetal to newborn stage
Yigang Du	Clutter removal design for high frame rate color flow imaging
Hiroki Takahashi	Cardiac blood flow with high frame rate ultrasound
Martin Pekar	Benefits of CMUT technology
Reza Pahdaman	Signal to noise ratio optimization for a CMUT based high frequency medical ultrasound imaging system

Session IV	**Elastography & tissue characterization**		
Session chairs	Sverre Holm + Tamie Poepping		
Responsible	Magnus	AV responsible	Borislav + Andreas

Sverre Holm	Modeling shear wave propagation in tissue
Patrick Segers	Soft tissue mechanics
N. J. Petterson	Ultrasound elastography for cardiac monitoring
Gijs Hendriks	Elastography for breast tumor detection
Emiel von Disseldorp	3D and 4D ultrasound elastography for abdominal aortic aneurysms
Darya Shcherbakova	Non-linear behavior and anisotropy in supersonic shear wave imaging
Michael Andre	Diagnosis and grading of diffuse liver diseases
Xiaowei Zhou	Raynauds's disease
Tobias Erlöv	Plaque characterization using averaged phase derivatives
Sebastien Salles	3-D motion estimation with transverse oscillation

Tuesday

Session V	**Contrast agents: Nano size & therapy**		
Session chairs	Peter Burns + Nico de Jong		
Responsible	Tomas	AV responsible	Jonas + Thor

Nico de Jong	**Contrast agents**
Paul Sheeran	Activated phase shift droplets - Challenges for progress in translation
Heleen Dewitte	Contrast agents for gene delivery
Ine Lentacker	Microbubble design for drug delivery
Ine De Cock	Ultrasound mediated drug delivery
Jeff Powers	Sonothrombolysis
Alfred Yu	Microbubble-mediated sonoporation biophysics
Libertario Demi	Nonlinear propagation through ultrasound contrast agents
Cachard Christian	Multipulse nonlinear imaging with contrast agents

Session VI	**Super resolution and photoacoustic imaging**		
Session charis	Georg Schmitz + David Evans		
Responsible	Tomas	AV responsible	Martin + Mariwan

Georg Schmitz	**Charcterization of capillary flow by tracking single bubbles**
Kirsten Christensen-Jeffries	Super resolution imaging with contrast agents
Lucy Taylor	Angiogenesis and tumor vascular imaging
Massimo Mischi	Angiogenesis from contrast dispersion analysis
Maria Evertsson	In vivo magnetomotive ultrasound imaging
M. Umit Arabul	Ex-vivo photoacoustic imaging of human carotid plaques
Guillaume Lajoinie	Photoacoustic phase change contrast agents
Hans-Martin Schwab	Photoacoustic imaging
Sophinese Iskandre-Rizk	Photoacoustic imaging
Carmel M Moran	Phantom development for high frequency ultrasound
Maarten Heres	Photoacoustic heamodynamic measurements

Session VII	**Vector flow imaging and tissue motion**		
Session chairs	Hans Torp + Kristoffer L. Hansen		
Responsible	Jørgen	AV responsible	Ramin + Hamed

Kristoffer L. Hansen	**Vector velocity imaging during cardiac surgery**
Yucel Karabiyik	Adaptive signal processing for vector velocity imaging
Stefano Ricci	Peak blood velocity estimation with vector-Doppler
Jørgen Avdal	Spectral Doppler imaging for jet flow velocity estimation
John Albinsson	Can out-of-plane motion be accurately detected and estimated?
Tom Anderson	Mouse cardiac phatoms based on PVA cryogel
Hendrik J. Vos	Cardiac shear wave imaging
Pieter Kruizinga	Next insights in high frame rate imaging
Ramin Moshavegh	Segmentation and quantitative measurements
Erik Groot Jebbink	In vitro characterisation of flow in the proximity of kissing stents

Wednesday

Session VIII　　　　**Elastography II**

Session chairs　　　　Chris de Korte + Patrick Segers

Responsible　　　　Magnus　　　AV responsible　Carlos + Tomasso

Chris L. De Korte　　**Ultrafast imaging to assess Pulse Wave Velocity: too complicated?**

Annette Caenen　　　Modelling of shear wave elastography

Maartje Nillesen　　　Cardiac deformation estimation through ultrafast imaging

Jeire Steinbuch　　　Spatial inhomogeneity in the common carotid artery

Rik Hansen　　　Ultrafast strain imaging for vascular applications

Pol Grasland-Mongrain　　Elastography without contact using Lorentz force

Stein Fekkes　　　US elastrography

Kaj Gysbertse　　　3D ultrasound elastography of muscles

Richard Lopata　　　Strain imaging and elastography

Svetoslav Nikolov　　Free hand starin imaging - what is the correct scaling?

Guy Cloutier　　　Carotid elastography

Session IX　　　　**Advanced ultrasound imaging systems**

Session chairs　　　　Hideyuki Hasegawa + Piero Tortoli

Responsible　　　　Tomas　　　AV responsible　Tobias + John

Piero Tortoli　　　**High-frame rate imaging methods and systems**

Hideyuki Hasegawa　　Adaptive beamforming

Tommaso Di Ianni　　Optimization of compact scanners

Marcin Lewandowski　　Novel ultrasound system using GPUs, CUDA and OpenCL

Enrico Boni　　　Novel ultrasound system

Alessandro Ramalli　　2D arrays for flow imaging

Barbara Nicolas　　　Spatial Encoding for Ultrafast Ultrasound Imaging

Sheng-Min Huang　　Parametric imaging for monitoring HIFU and laser based ablation and drug delivery

Mariwan Baker　　　Challenges in 3D/4D imaging for radio theraphy

Adrian Basarab　　　Joint inverse problems in US imaging

Jovana Janjic　　　Development of a Forward-looking IVUS probe for coronary artery applications