Heart Rhythm Disorders. December 3-5, 2014.

**Wednesday, December 3rd**

8:15-8:55  Breakfast at NIMBioS

9:00-9:15  Introduction to NIMBioS

9:15-9:40  Introduction of Participants

9:45-10:45  Talk: “Simple to complex models and mechanisms of arrhythmia: historical perspective” by Flavio Fenton.

break

11:00-11:45  Talk: “Spatiotemporal dynamics and control of alternans” by Alain Karma.

Lunch at NIMBioS

1:30-2:00  Talk: “Bifurcation analysis of cardiac alternans” by Xiaopeng Zhao.

2:00-2:30  Talk: “Local onset of alternans in the heart” by Elena Tolkacheva.

2:30-5:00  Collaborative discussion groups

5:00-6:30  Reception at NIMBioS
Thursday, December 4th

8:15-8:55  Breakfast at NIMBioS

9:00-9:45  Talk: “Multiscale analysis of heart rate variability” by Jianbo Gao

Break

10:00-10:45  Talk: “Spatiotemporal characterization of surface ECG for atrial fibrillation therapy and management” by Marianna Meo.

Break

11:00-12:00  Discussion groups

Lunch at NIMBioS

1:30-2:00  Talk: “Calcium alternans as a phase transition in cardiac myocytes” by Yohannes Shiferaw

2:00 -2:30  Talk: “Controlling alternans via point stimulation” by John W. Cain

2:30-3:00  Talk: “Control of cardiac alternans as a means of illuminating alternans mechanisms” by David Christini.

3:30-5:00  Collaborative Discussion Groups

Dinner on your own
Friday, December 5th

8:15-8:55  Breakfast at NIMBioS

9:00-9:30  Talk:  "Triggered Activity in LQT Syndrome" by Alain Karma

9:30-10:00  Talk:  "Mechanisms by which specific patterns of premature beats can lead to VT and VF" by Niels Otani.

Break

10:15-11:45  Facilitated discussion of future directions with all workshop participants

Lunch at NIMBioS