Day 1, July 19th, 2018
8:00 - 8:20     Registration
8:20 - 8:30     Welcome and Introduction (Markl, Collins, Schnell)
8:30 - 9:15     Introduction to 4D Flow MRI I - Methods and Concepts: Data Acquisition (Markl)
9:15 - 10:00    Introduction to 4D Flow MRI II - Methods and Concepts: Data Analysis (Schnell)
10:00 -10:30    Q&A & Coffee Break & Walk to Center of Translational Imaging (CTI)
10:30 -11:30   Group 1: Live 4D Flow Protocols and Human Subject Scans @ 1.5T
10:30 -11:30   Group 2: Hands-On 4D Flow Data Analysis - Introduction to Circle 4D Flow Module
11:45 -12:45   Group 2: Live 4D Flow Protocols and Human Subject Scans @ 1.5T
11:45 -12:45   Group 1: Hands-On 4D Flow Data Analysis - Introduction to Circle 4D Flow Module
12:45 -1:45     Lunch
1:45 - 3:30     Hands-On 4D Flow Data Analysis - Thoracic Aorta Cases (aortic valve disease, coarctation, dissection)
3:30 - 4:00     Q&A & Coffee Break
4:00 - 5:30     Hands-On 4D Flow Data Analysis - Thoracic Aorta Cases (aortic valve disease, coarctation, dissection)
6:00 - 9:00     Dinner

Day 2, July 20th, 2018
8:30 - 9:00     4D Flow MRI Applications: Cardio-Thoracic (Collins)
9:30 - 10:00    4D flow MRI Scan Protocols - Review & Live Simulation (Markl)
10:00 - 11:00   Hands-On 4D Flow Data Analysis - Whole Heart Cases (complex CHD)
11:00 - 11:30   Q&A & Coffee Break / Brunch
11:30 - 12:00   4D Flow MRI Applications: Abdomen & Emerging Areas (Collins)
12:00 - 13:30   Hands-On 4D Flow Data Analysis - Whole Heart & Select Cases
13:30 - 14:00   4D Flow Recap (Markl, Collins, Schnell)
14:00           Conclusion of course

- Live MRI scanning (human subjects) / scan simulation
- Hands-on 4D flow analysis