Patient specific computational modelling

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There has been a steep increase in patient specific numerical modelling over the past five years. This can be attributed to the recent developments in geometric modelling, mesh generation and physical modelling tools. However, a significant further progress is needed to increase the understanding of various patient specific, biomedical related aspects. This area is likely to grow very fast, all over the world, over the next few years due to potential cure for various human body related problems, via better understanding. Such a growth will directly be linked to the well being of human population. The proposed mini-symposium will bring together researchers that are interested in using patient specific information in some form or other in numerical modelling.

The topics of the mini-symposium include

1. Geometry extraction from images, image processing
2. Patient specific mesh generation
3. Patient specific physiological flows, fluid structure interaction
4. Patient specific aneurysms
5. Patient specific soft tissue modelling/large deformation
6. Patient specific human organ modelling, modelling of surgery
7. Patient specific upper and lower human airway modelling, particle transport
8. Multiscale modelling from cell properties
9. Patient specific machinery design and analysis