



## CCB Special Interest Group on Segmentation – SIG-SEG

### Meeting (01/27/05, 11:00AM - 12:30PM) – Agenda

1. Current *Status-Quo* of the different CCB Segmentation approaches
  - a. Vese's Group – (*Mumford-Shaw minimization*)
  - b. Chan's Group – (*bounded total variational PDEs*)
  - c. Osher's Groups – (*level sets*)
  - d. Shattuck's Group – (*morphological operators*)  
(<http://neuroimage.usc.edu/SoftBrainSuite.html>).
  - e. Valentino's Group (*charged particles and level-sets*).
  - f. Esedoglu – (*optimization method for improving Level-Sets methods in 3D*).
  - g. Qian – (*methods for solving 3D level-set evolution and mean-curvature motion equations using radial-based functions*).
  - h. Alexandrov – (*feature-based 3D warping method*).
  - i. Tohka – (*mixture models using genetic algorithms*).
2. Plan for JOINT endeavors (Math/IPAM/LONI/Radiology)
  - a. Sharing techniques, software, know-how's (e.g., optimization strategies), visualization tools & data – draft a *CCB internal sharing of SW and Data*.
  - b. Software Development considerations (ensure integrability, stability, expandability and portability of all CCB resources).
    - i. [http://www.vtk.org/Wiki/VTK\\_Documentation](http://www.vtk.org/Wiki/VTK_Documentation)
    - ii. [http://www.vtk.org/Wiki/ITK\\_Documentation](http://www.vtk.org/Wiki/ITK_Documentation)
    - iii. <http://www.slicer.org/>
    - iv. <http://www.loni.ucla.edu/Software/>
    - v. <http://neuroimage.usc.edu/SoftBrainSuite.html>
  - c. Joint publications – any CCB member who has contributed to the work in a scientific publication should be acknowledged (as a contributor or co-author)
3. Technique validation
4. Need to put all CCB software online at: [http://www.loni.ucla.edu/CCB/CCB\\_Resources.html](http://www.loni.ucla.edu/CCB/CCB_Resources.html)
5. Technical reports and Publications to put online  
([http://www.loni.ucla.edu/CCB/About/Inside\\_CCB/index.html](http://www.loni.ucla.edu/CCB/About/Inside_CCB/index.html))
6. Next SIG-SEG meeting & upcoming CCB SW Development and demo meeting 02/24/05.

