

First Meeting Stic AmSud Project

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Universidad Chile
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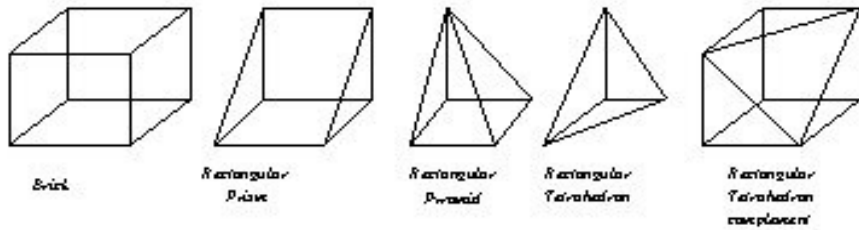
Who are we?

- University of Chile (founded in 1842)
- Mathematics and Physics Faculty Civil Engineering
 - Civil Engineering in Mechanics
 - Civil Engineering in Industrial Processes
 - Civil Engineering in Electronics
 - Computer Science
 - Civil Engineering in Biotechnology
 - Geophysics
 - Astronomy
 - Geology
- Departament of computer science
 - Created in 1975
 - 22 Full professors
 - ~200 undergraduated students
 - 23 master students, 41 phd students

Research areas?

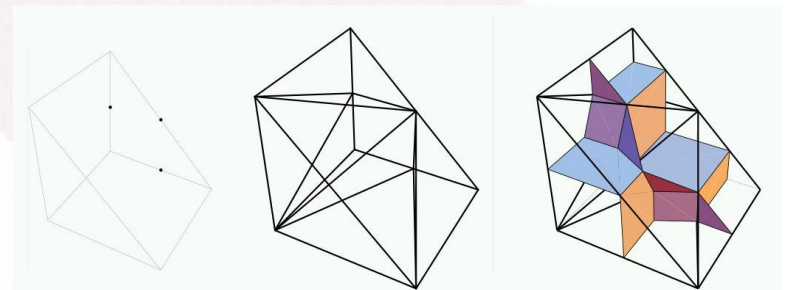
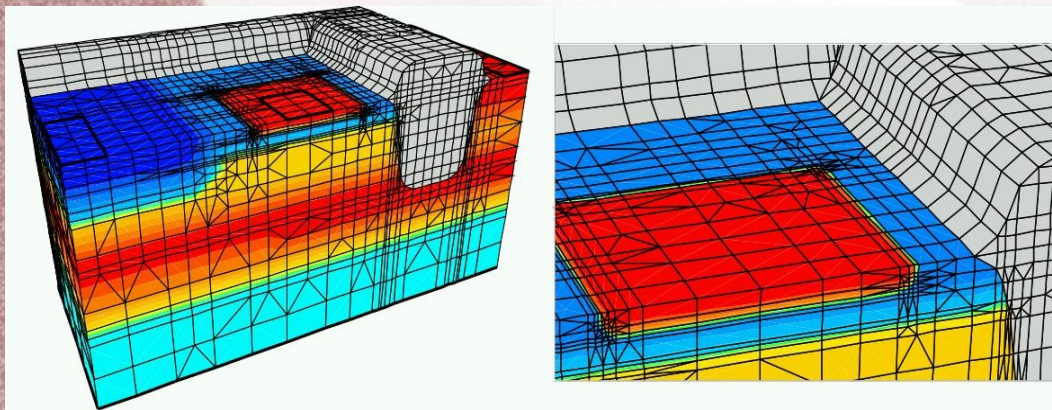
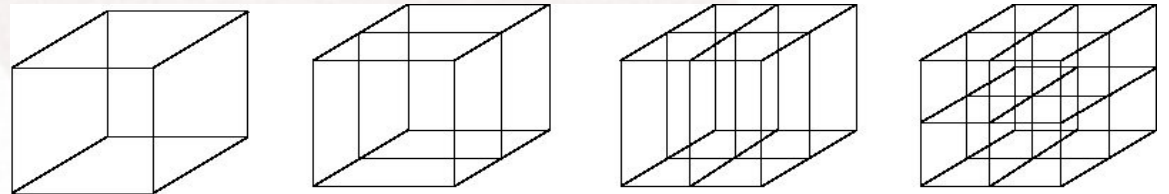
- Algorithms and data structures
- Web research
- Software engineering
- Programming Languages
- Collaborative systems
- Geometric modeling, meshing and computational science and engineering
- ...

My reseach area

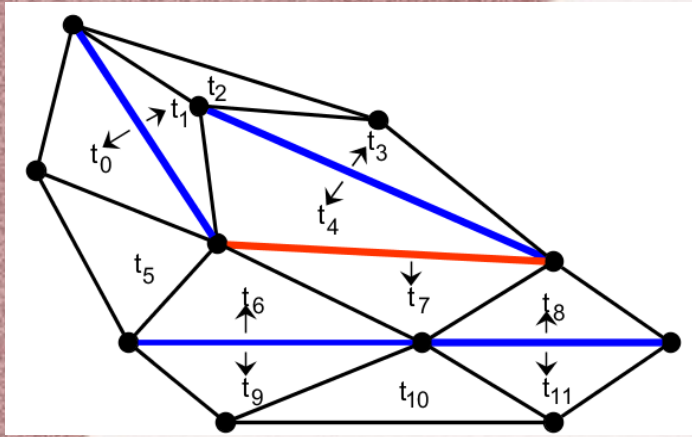


- Academic history:

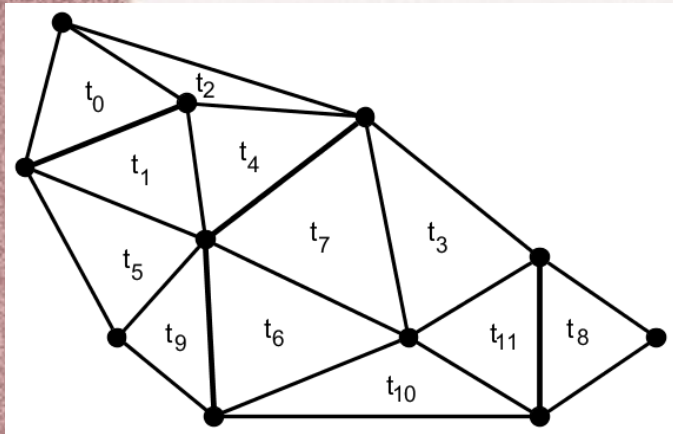
- Bachelor and Master in computer Science, DCC, University of Chile
- Dr. Technischen Wissenschaften, ETH-Zurich, Switzerland



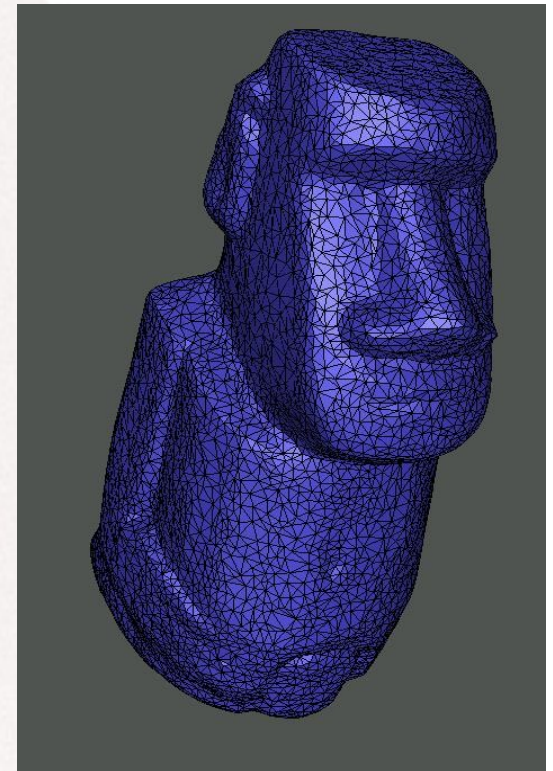
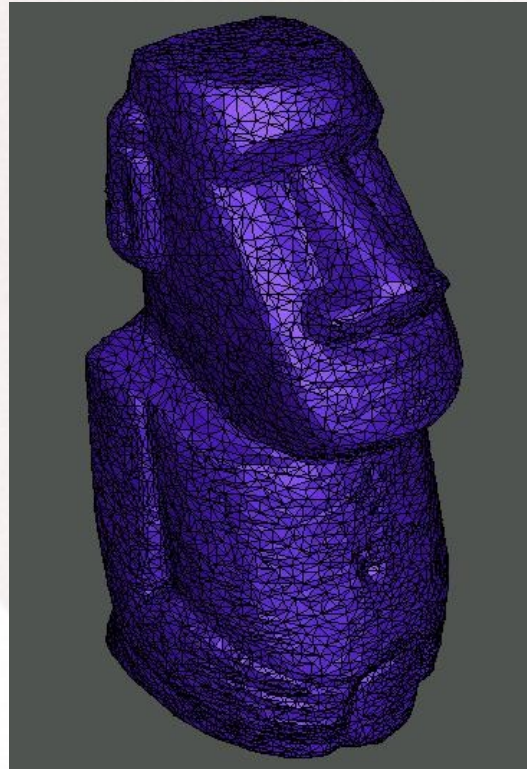
My research area



Non Delaunay mesh



Delaunay mesh

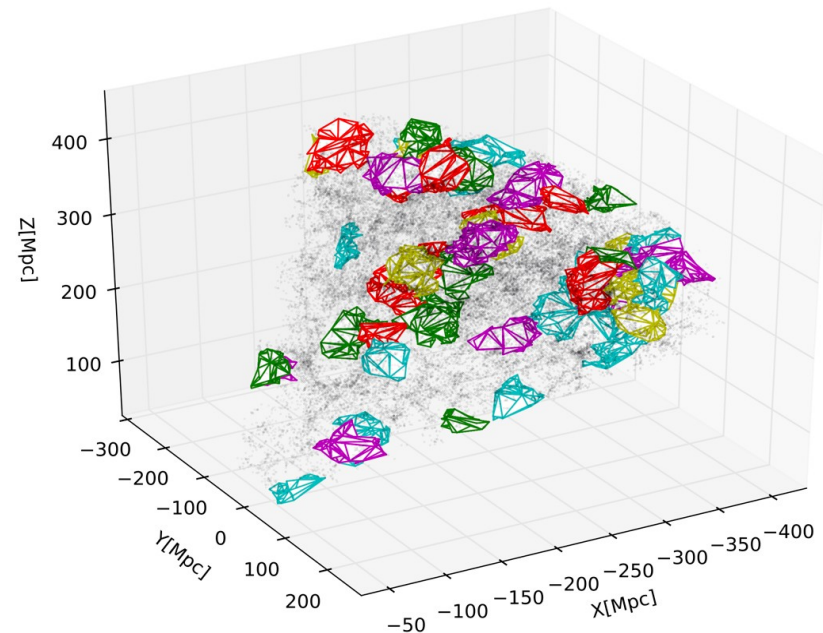
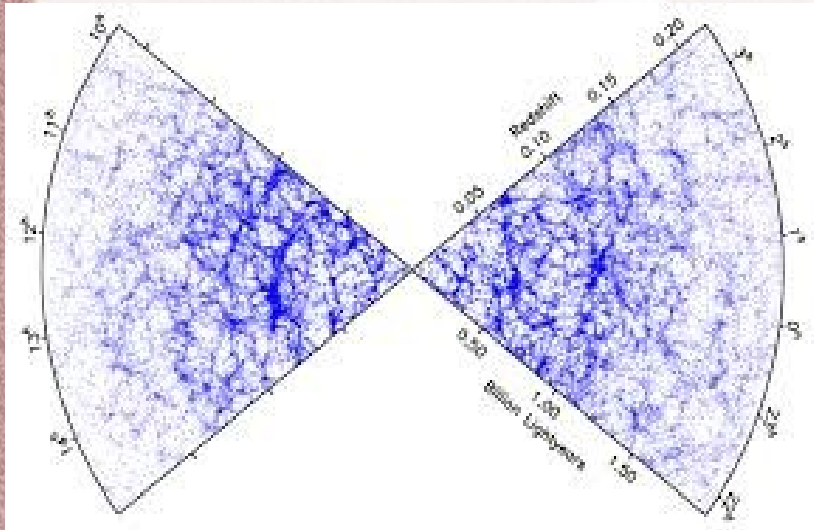


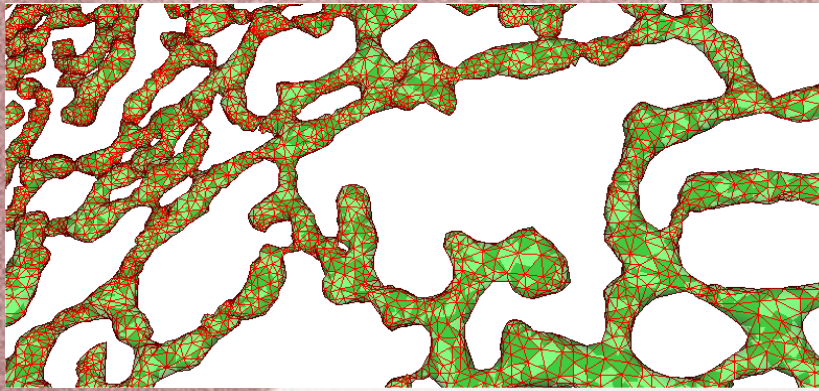
Research group: Cristobal Navarro and Valentin Muñoz



My research area

- Understanding the large scale structure of the universe
 - Group: Luis campusano, (Dr., astronomer), Carlos Hervias (astronomy student), Giselle Font y Sebastián Pereira (computer science student)





My current research

- Improving the efficiency of meshing algorithms
 - Mixed and triangular (2D and 3D) meshes
 - Parallel approach mainly on GPU
- Geometric modeling applied to science and engineering
 - Biomedical applications ([Violeta Chang](#), Jorge Jara, Steffen Haertel)
 - Hydrological modeling (P. Sanzana, X. Vargas, S. Jankowsky, F. Branger, I. Braud, J Gironás)
 - Face animation (Lucas Terissi, Mauricio Cerda, Bernard Girau, Renato Valenzuela, Juan Carlos Gomez)
 - Astronomy
 - Detection of voids
 - Detection of galaxy clusters

End

- ¿Questions?