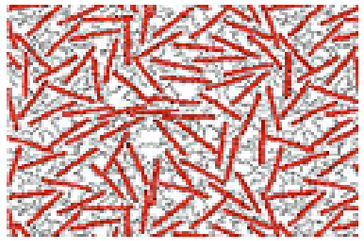
GMA08 Genova, 29/2–1/3 2008

# *MATERIALI INDISCIPLINATI*

Chandrajit Bajaj, Christian Cherubini,
Antonio De Simone, Antonio Di Carlo,
Elena Di Martino, Simonetta Filippi,
Franco Milicchio, Alessandro Moroni,
Salah Naili, Paola Nardinocchi,
Alberto Paoluzzi, Sara Quiligotti,
Marco Ribezzi Crivellari,
Vittorio Sansalone, Vadim Shapiro,
Amabile Tatone, Luciano Teresi,
Miroslava Tringelová,
Valerio Varano,
Lena Rebecca Zastrow

# Elastomeri nematici

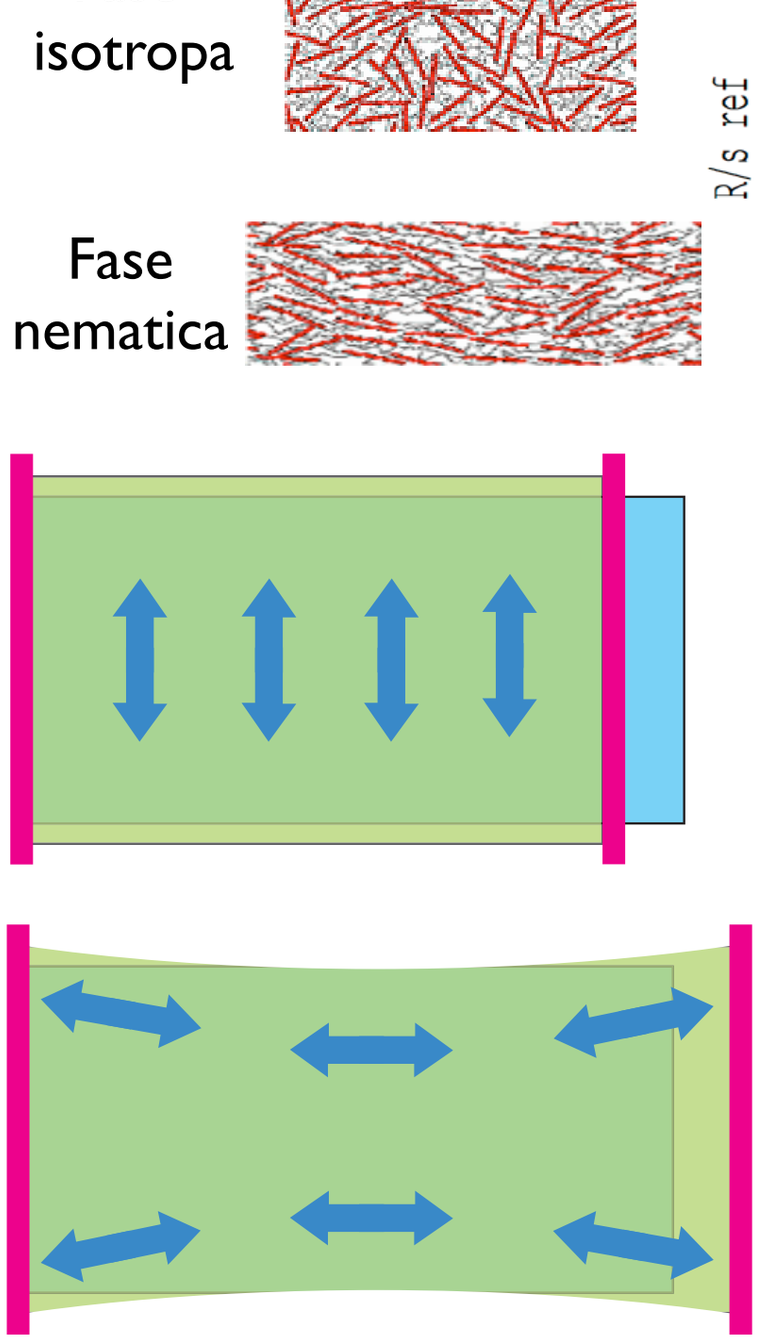
Fase isotropa

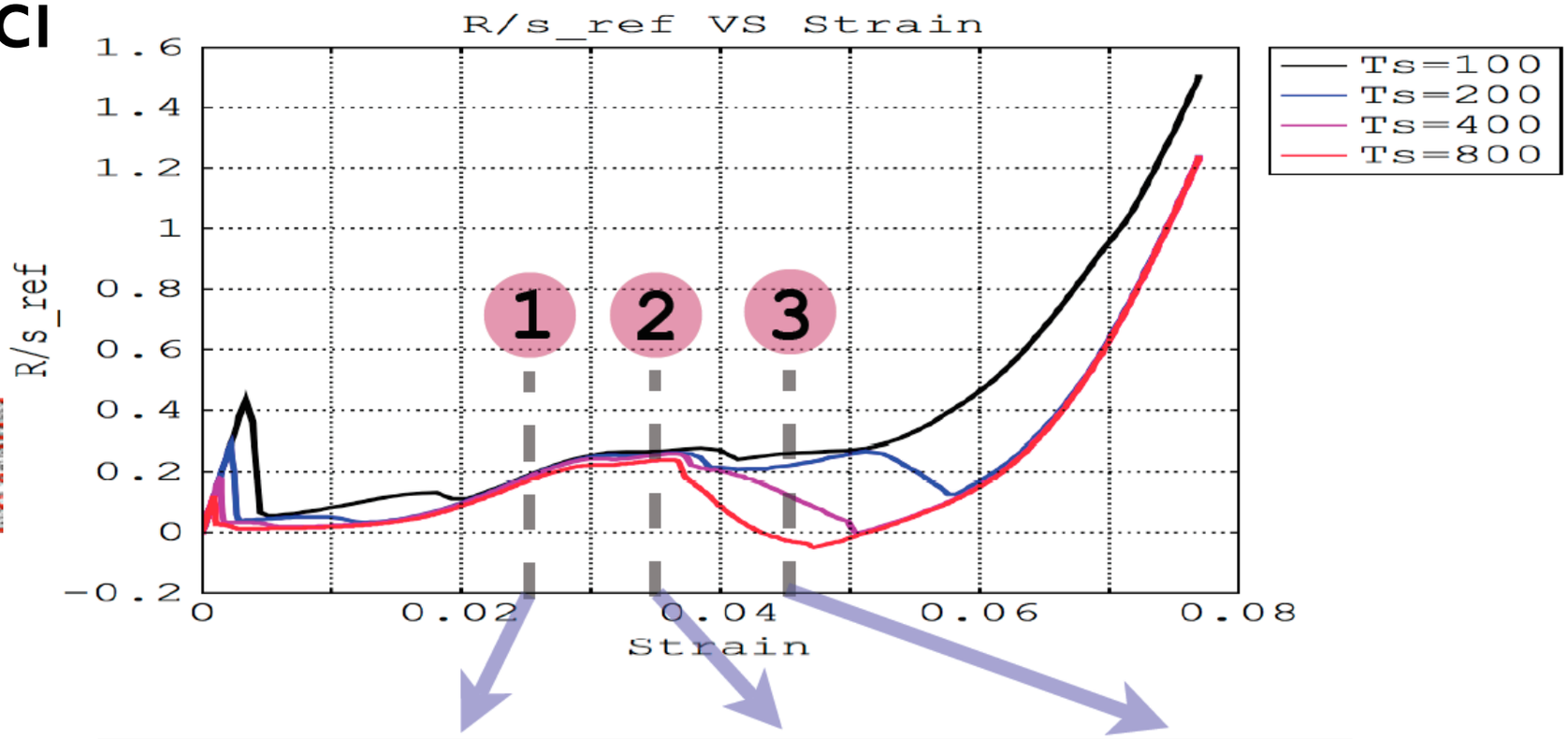


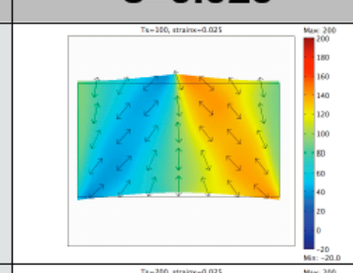
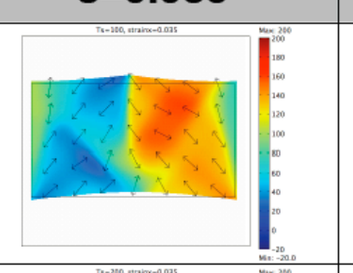
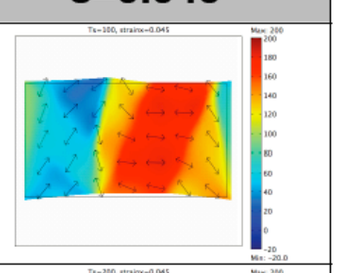
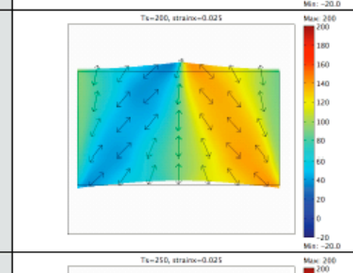
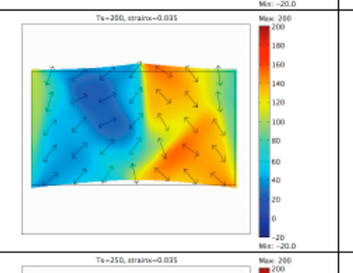
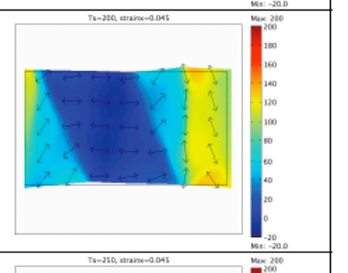
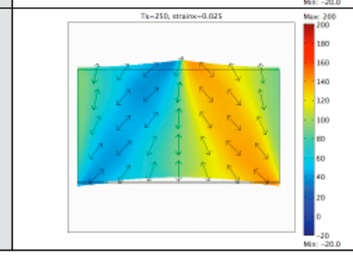
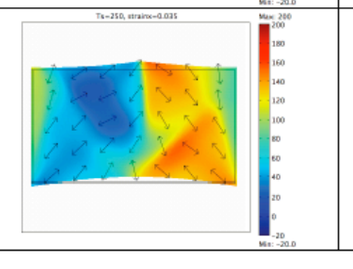
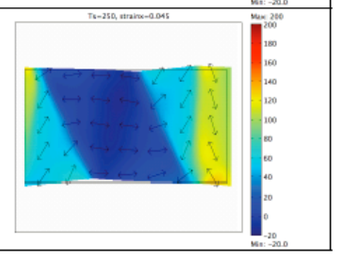
Fase nematica



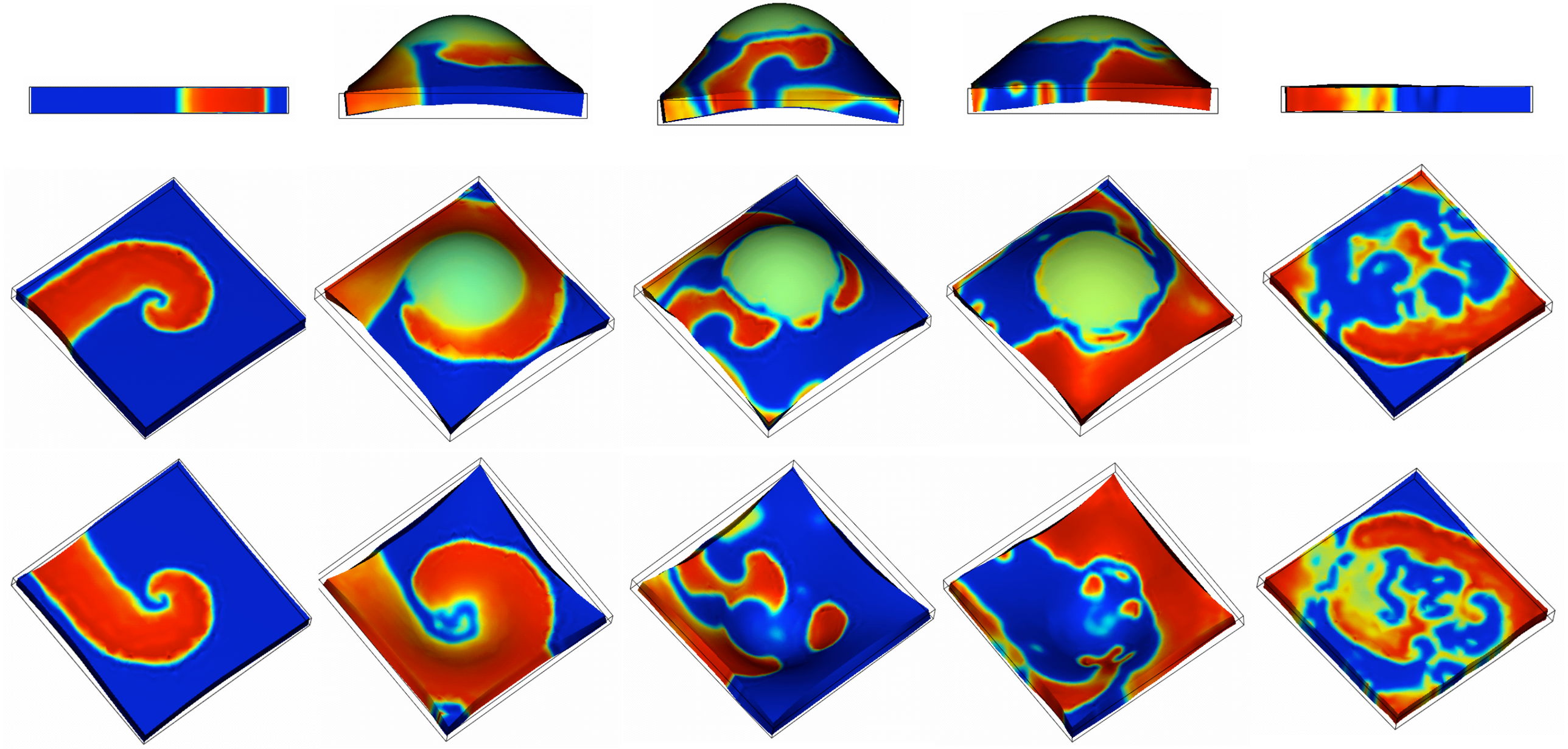






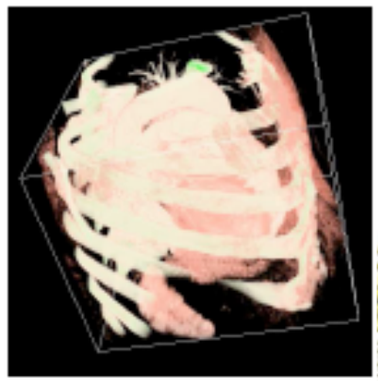

| | ε=0.025 | ε=0.035 | ε=0.045 |
|---|---|---|---|
| Ts=200 |  |  |  |
| Ts=400 |  |  |  |
| Ts=800 |  |  |  |

A. De Simone, adc, L. Teresi: Critical voltages and blocking stresses in nematic gels. EPJ E **24**, 303–310 (2007)



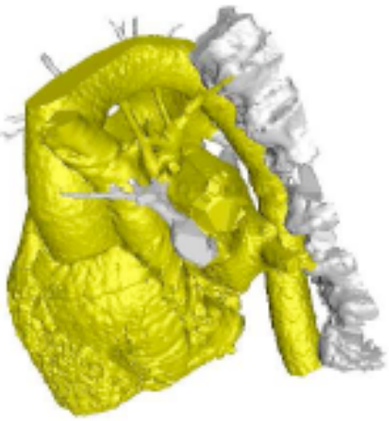
Defibrillazione meccanica: viste laterali, dal lato concavo e da quello convesso (a 0.0, 0.2, 0.9, 2.3, 2.9 s; il codice di colore rappresenta il potenziale d'azione)

C. Cherubini, S. Filippi, P. Nardinocchi, L. Teresi:
An electromechanical model of cardiac tissue: constitutive issues and electrophysiological effects.
Progress in Biophysics and Molecular Biology (to be published on a special issue focussed on Mechanosensitivity)



(a)

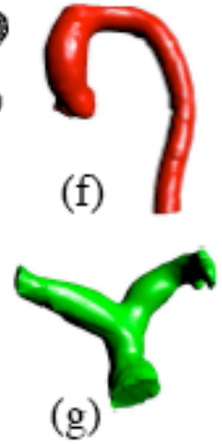
(b)



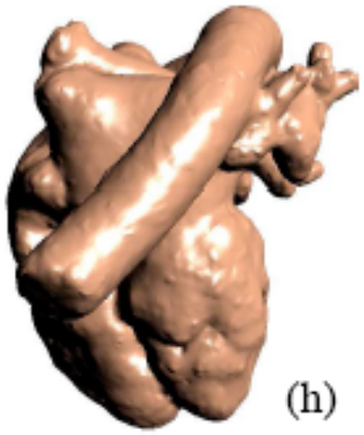
(c)

(d)

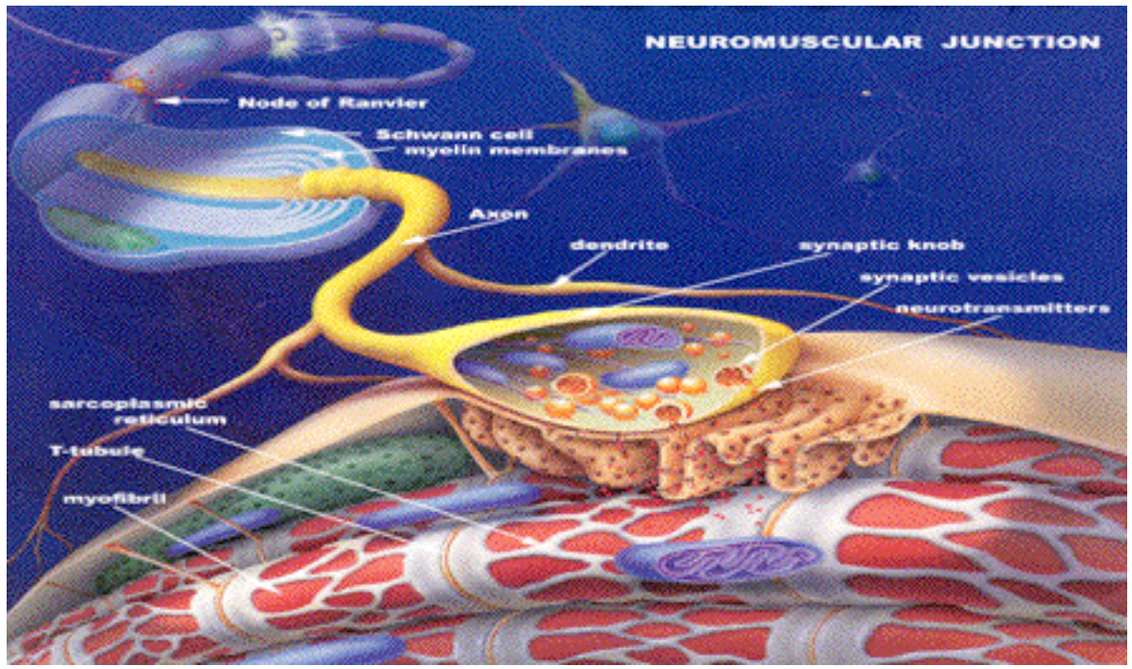
(e)

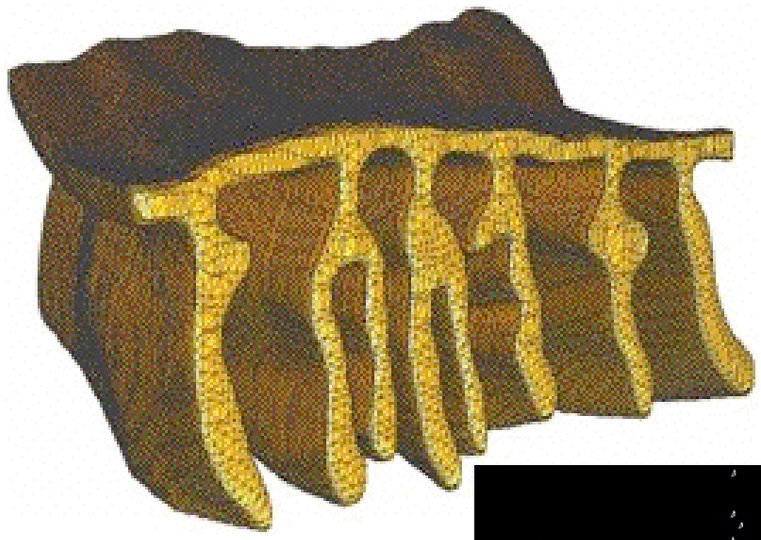


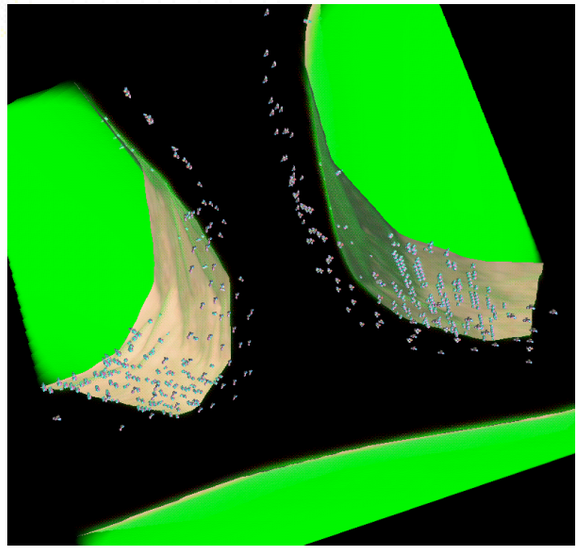
(f) (g)

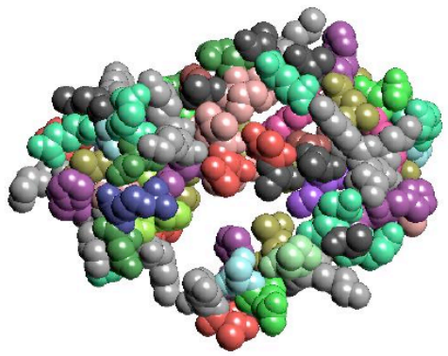


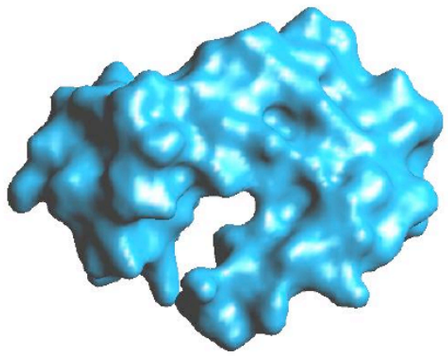
(h)

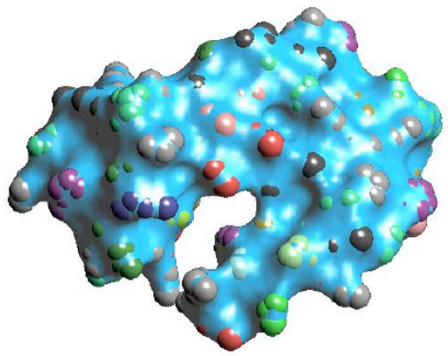










C. Bajaj, adc, A. Paoluzzi: ProtoPLASM: Parallel LAnguage for Scalable Modeling of Biosystems.
Phil. Trans. Roy. Soc. A (submitted for a special issue dedicated to Physiome, multiscale modelling, and the VPH)