

## LIST OF PUBLICATIONS

### Peer-reviewed journals

A.Sarti, G.Citti, "The constitution of perceptual units in the functional architecture of V1" submitted 2014

G.Citti, A.Sarti, "A Gauge Field model of modal completion", submitted 2014

D.Barbieri, G.Citti, A.Sarti, "How uncertainty bounds the shape index of simple cells", *The Journal of Mathematical Neuroscience*, Vol. 4, N.5, 2014

D.Barbieri, G.Citti, G. Cocci, A.Sarti, "A cortical-inspired geometry for contour perception and motion integration", *Journal of Mathematical Imaging and Vision*, 2014

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D.Barbieri, G.Citti, G.Sanguinetti, A.Sarti, "An uncertainty principle underlying the functional architecture of V1", *Journal of Physiology Paris*, 106(5-6), pp. 183-193, 2012

A.Sarti, G.Citti, "On the origin and nature of neurogeometry", *La Nuova Critica*, 2011

C.Marchetti, A.Bianchi, M. Di Martino, L.Lancellotti, A.Sarti, "Validation of new soft tissue software in orthognatic surgery planning", *Intenational Journal of Oral and Maxillofacial Surgery*, 40(1), pp. 26-32, 2011.

G.Sanguinetti, G.Citti, A.Sarti, "The statistics of contours of natural images in the affine group", submitted to *Journal of Vision*.

D.Barbieri, G.Citti, G.Cocci, A.Sarti, "A cortical-inspired geometry for contour perception and motion integration", submitted to *Journal of Mathematical Imaging and Vision*.

G.Sanguinetti, G.Citti, A.Sarti, "A model of natural image edge cooccurrence in the rototranslation group", *Journal of Vision*, 10(14):37, pp 1-16, 2010

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M.Campana, A. Sarti. (2010) Cell Morphodynamics Visualization from Images of Zebrafish Embryogenesis. *Elsevier-Computerized Medical Imaging and Graphics*. 2010 Jul;34(5):394-403

C. Zanella, M. Campana, C. Melani, B. Rizzi, P. Bourguine, K. Mikula, N. Peyri eras, A.Sarti (2010) Cells Segmentation from 3-D+Time Confocal Images of Early Zebrafish Embryogenesis. *IEEE Transaction on Image Processing*; 2010 Mar;19(3):770-781.

P.Bourguine, R.Cunderlik, O.Drblikova, K.Mikula, N.Peyrieras, M.Remesikova, B.Rizzi, A.Sarti, 4D embryogenesis image analysis using PDE methods of image processing, *Kybernetika*, Vol. 46, No. 2 (2010) pp. 226-259.

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- A.Sarti, G.Citti, J.Petitot, “Functional geometry of the horizontal connectivity in the primary visual cortex”, *Journal of Physiology-Paris*, Vol. 103, n. 1-2, pag. 37-45, 2009
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F.Iudicello, F.S.Henry, M.W.Collins, S.Salmons, A.Sarti, C. Lamberti. "Comparison of hemodynamics structures between a skeletal muscle ventricle and the human left ventricle", *Internal Medicine*, vol. 5, pag. 1-10, 1997

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### **Authorship of International Books**

[BS] F.Berardi, A.Sarti, "RUN Morphogenesis", 2012, Documenta Kassel Publisher.

### **Editor in Chief of International Books Series**

A.Sarti is editor in chief of the Springer Series "Lecture Notes in Morphogenesis", Springer-Verlag Publisher. Since October 2012

<http://www.springer.com/series/11247>

### **Editor of International Books**

“Individuation and Morphogenesis”, A. Sarti, F. Montanari, F. Galofaro ed., Springer Publisher, 2014

“Neuromathematics of Vision”, by G.Citti, A.Sarti, Springer Publisher 2014.

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“Harmonic and Geometric Analysis”, edited by G.Citti, L.Grafakos, C.Pérez, A.Sarti, X.Zhong, Birkhauser Basel Publisher, 2014.

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### **Chapters in International Books**

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C.Lamberti, A.Sarti, C.Corsi, R.Battani, R.Gori, C.Marchetti, A.Bianchi, “VISU: A System for Computer Aided Cranio-Facial Surgery”, MEDICON 2004, Ischia 31 luglio – 5 agosto 2004.

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F. Brancaleoni, M. Falsini, C. Lamberti : " Un ambiente integrato per il trattamento di dati ecografici tridimensionali". ANIPLA Atti del Convegno Nazionale BIOSYS 1998 'Sanita' e Sistemi Medicali: Automazione ed Informatizzazione'. Milano 2-4 Aprile 1998, pp. 315-323, 1998.

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### **Internal Reports**

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