

# List of Publications

## Journals

- Yosi Keller and Yaniv Gur, "A diffusion approach to network localization", accepted to IEEE Trans. on Signal Processing, January 2011.
- Ofer Pasternak, Nir Sochen, Yaniv Gur, Nathan Intrator and Yaniv Assaf, "Free Water Elimination and Mapping from Diffusion MRI". Magnetic Resonance in Medicine, vol. 62, pp. 717-730, July 2009.
- Y. Gur, O. Pasternak and N. Sochen, "Fast  $GL(n)$ -Invariant Framework for Tensors Regularization", International Journal of Computer Vision (IJCV), vol. 85, pp. 211-222, December 2009.
- Y. Gur and N. Sochen, "Regularizing flows over Lie groups", Journal of Mathematical Imaging and Vision (JMIV), vol 33, pp. 195-208, January 2009.
- Y. Gur and N. Sochen, "Diffusion over Tensor Fields via Lie-Group PDE Flows", Contemporary Mathematics, vol. 438, pp. 75-94, 2007.
- Y. Gur and A. Mann, "Radial coherent states – From the harmonic oscillator to the hydrogen atom", Phys. of Atomic Nuclei, vol. 68, pp. 1700–1708, October 2005.

## Conferences

### Full papers

- Manasi Datar, Yaniv Gur, Beatriz Paniagua, Martin Styner, and Ross Whitaker, "Geometric correspondence for ensembles of nonregular shapes", accepted to MICCAI 2011.
- Fangxiang Jiao\*, Yaniv Gur\*, Chris Johnson and Sarang Joshi, "Revealing white-matter crossing fibers with high-order tensors and rank-k decompositions", IPMI 2011, Irsee, Germany. (\*) Equal contribution.
- Y. Gur and N. Sochen, "Non-Abelian invariant feature detection", ICPR 2008, Tampa bay, Florida.
- Y. Gur and N. Sochen, "Fast Invariant Riemannian DTI regularization", Mathematical Methods in Biomedical Image Analysis (MMBIA) 2007, Rio de Janeiro, Brazil.
- Y. Gur and N. Sochen, "Coordinates free diffusion over compact Lie-groups", International Conference on Scale-Space and Variational Methods (SSVM), Ischia Island, Italy, May 2007.
- Y. Gur and N. Sochen, "Denoising Tensors via Lie Group Flows", in Proceedings of the International Conference on Variational, Geometry and Level-Sets Methods in Computer Vision (VLSM), Beijing, China, October 2005.

### Extended abstracts

- Y. Gur, O. Pasternak and N. Sochen, "Regularization of Diffusion Tensor MRI via Local Coordinates", Proceedings of the 6th International Congress on Industrial and Applied Mathematics (ICIAM), ETH-Zurich, July 2007.
- Y. Gur, O. Pasternak and N. Sochen, "Fast  $GL(n)$ -Invariant Approach for Tensor Regularization", Proceedings of the SNDS bi-national workshop on: MRI of brain connectivity and microstructure: Measurement and Validation, Ein-Bokek, Israel, November 2007.

## Book chapters

- Y. Gur, Ofer Pasternak and N. Sochen, "Fast  $GL(n)$ -Invariant framework for tensors regularization", in "Mathematical Methods for Signal and Image Analysis and Representation", Springer-Verlag, in preparation.
- Y. Gur and N. Sochen, "Coordinates-based diffusion over the space of symmetric positive-definite matrices", in "Visualization and Processing of Tensor Fields - Advances and Perspectives", Springer-Verlag, Berlin Heidelberg, 2009.