# Srinivas Gorur-Shandilya

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(updated August 2017)

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## Education

Yale University (2017) Ph.D. Thesis advisor: Thierry Emonet
The University of Göttingen (2010) M.Sc.
St. Stephen's College, University of Delhi (2008) B.Sc.

## Research Experience

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| Jan. 2011 - Jul. 2017 | Ph.D. research, Yale Universty. I worked with Prof. Thierry Emonet, studying adaptation and gain control in *Drosophila* olfactory sensory neurons |
| Mar. 2010 - August 2010 | Research Assistant, Max Planck Institute for Nonlinear Dynamics and Self-Organisation, Göttingen, Germany. Working with Dr. Marc Timme, I developed a method for reconstructing networks from observations of their dynamics. |
| Sep. 2009-Mar. 2010 | M.Sc. research, Max Planck Institute for Nonlinear Dynamics and Self-Organisation, Göttingen, Germany. I worked with Dr. Marc Timme to study the mapping from network topology to network dynamics in a model of a neuronal network in a lobster. |

## Professional Activities and Awards

ah-hoc reviewer, *New Journal of Physics* and *Scientific Reports*

* Presenters' Travel Grant, Cosyne, USA (2016)
* Conference Travel Fellowship, Graduate Student Assembly, Yale University, USA (2015)
* Anne S. And William H. Macmillian Fellowship, Yale University, USA (2011-2013)
* Research Fellowship, Max Plank Society, Germany (2009-2010)
* Fellowship from the Excellence Foundation for the Promotion of the Max Planck Society, Max Plank Society, Germany (2008-2009)
* KVPY Fellowship, The Indian Institute of Science, India (2005-2008)

## Publications

**S Gorur-Shandilya**[1], M Demir[1], J Long, DA Clark and T Emonet (2017) "Olfactory receptor neurons use gain control and complementary kinetics to encode intermittent odorant stimuli" *eLife* ([1] = equal contribution)

D Raccuglia, LY McCurdy, M Demir, **S Gorur-Shandilya**, M Kunst, T Emonet, and M Nitabach. (2016) "Temporal contrast enhancement in the *Drosophila* olfactory system regulates behavioral responses to plume-like stimuli" *eNeuro*

T-W Koh, Z He, **S Gorur-Shandilya**, K Menuz, NK Larter, S Stewart and JR Carlson. (2014) "The *Drosophila* IR20a Clade of Ionotropic Receptors Are Candidate Taste and Pheromone Receptors" *Neuron.*

**S Gorur-Shandilya** and M Timme. (2011) "Inferring Network Topology from Complex Dynamics" *The New Journal of Physics.*

**S Gorur-Shandilya** (2009) "Relating topology and dynamics in neuronal networks" *(M.Sc. thesis)*

## Public Talks

"Sequential gain control in *Drosophila* olfactory receptor neurons." Accepted talk at Sense2Synapse, New York, USA. (2016)

"Topology Predicts Dynamics; Dynamics Constrain Topology." Invited talk at SIAM Conference on Applications of Dynamical Systems (DS15), Snowbird, USA. (2015)

"Why is anything the way it is?" Short talk at the 30th Chaos Communication Congress (30C3), Hamburg, Germany. (2013)

## Teaching

Teaching Fellow for Dynamical Systems in Biology (MCDB 361), taught by Profs. Thierry Emonet, Damon Clark and Jonathan Howard (2014)

Teaching Fellow for Neurobiology (MCDB 320a), taught by Profs. Haig Keshishian and Paul Forscher. (2010)

## Projects

**FlyVoyeur**, a MATLAB toolbox to annotate and analyse videos of *Drosophila* courtship. Free software, available at https://github.com/sg-s/fly-voyeur

**kontroller**, a MATLAB toolbox for data acquisition and control of experiments. Free software, available at https://github.com/sg-s/kontroller

**spikesort**, a MATLAB toolbox for sorting spikes from extracellular recordings of *Drosophila* ORNs. Free software, available at https://github.com/sg-s/spikesort