

# **Circuits and Behavior in Tuscany**

**Dates: 06/18/2017 – 06/23/2017**

The purpose of the meeting is to bring together an international group of scientists who share an interest in understanding the interplay of sensory processing, circuit dynamics and the generation of behavior in the insect and vertebrate brain.

A specific focus is on the recording and manipulation of large groups of neurons in an awake and behaving animal.

We want to emphasize and encourage open discussion, the sharing of data and specifically encourage the presentation of ongoing projects rather than published results.

Location: Montecastelli Pisano

For directions etc go to [http://it.wikipedia.org/wiki/Montecastelli\\_Pisano](http://it.wikipedia.org/wiki/Montecastelli_Pisano)

# Schedule

	Mon	Tue	Wed	Thu
Morning 1 (9:00-10:00)	3xTalk	3xTalk	3xTalk	3xTalk
Break				
Morning 2 (10:30-11:50)	4xTalk	4xTalk	4xTalk	4xTalk
Lunch				
Afternoon 1 (15:00-16:00)	3xTalk	Breakout groups Open discussion	Breakout groups Open discussion	<b>the next best thing</b> break-out discussion groups at Romitorio Pizza party
Break				
Afternoon 2 (16:30-17:30)	3xTalk			
Dinner/Break				
Plenary (21:00-22:00)	Plenary	Plenary	Concert	Plenary

# **Sunday**

**12:00 – 17:00:      Arrival**

**18:30 – 20:00:      Dinner**

**21:00 – 22:00:      Welcome and Introductory Lecture  
Florian Engert-Fish Feelings**

# Monday

## 9:00 – 11:30 (Chair: Armin Bahl)

9:00 – 9:20: Bianco, Isaac  
TBD

9:20 – 9:40: Bormuth, Volker  
TBD

9:40 – 10:00: Cury, Kevin  
A Neural Circuit that Coordinates Egg Laying in Drosophila

----- Break -----

10:30 – 10:50: deBivort, Benjamin

The hunt for loci of individuality: Ca<sup>++</sup> correlates of individual behavioral bias

10:50 – 11:10: Debregeas, Georges  
TBD

11:10 – 11:30: del Bene, Filippo  
TBD

11:30 – 11:50: Free time

----- Lunch -----

## 15:00 – 16:00: (Chair: Hanna Zwaka)

15:00 – 15:20: Du, Jiulin  
TBD

15:20 – 15:40: Dunn, Tim  
Deep Learning for Connectomics?

15:40 – 16:00: Fotowat, Haleh  
Habituation to looming stimuli in larval zebrafish

----- Break -----

16:30 – 16:50: Bahl, Armin  
TBD

16:50 – 17:10: Portuges, Ruben  
TBD

17:10 – 17:30: Haesemeyer, Martin  
Heat sensation in larval zebrafish

----- Dinner -----

**21:00 – 22:00:**            **plenary lecture**  
**Georg Keller**            **In proving foresight may be vain:**  
                                 **the best-laid schemes o' mice an' men - gang aft agley**

# Tuesday

**(Chair: Tim Dunn)**

- 9:00 – 9:20: Hong, Kate  
The role of barrel cortex in sensory detection: a study in transient vs chronic inactivation of S1
- 9:20 – 9:40: Horstmeyer, Roarke  
A microscope array for imaging over an unbounded field-of-view with cellular-scale resolution
- 9:40 – 10:00: Huang, Kuo-Hua  
Two-photon calcium imaging in the forebrain of adult zebrafish during virtual navigation

----- Break -----

- 10:30 – 10:50: Hübener, Mark  
TBD
- 10:50 – 11:10: Josch, Max  
TBD
- 11:10 – 11:30: Hildebrand, David  
TBD
- 11:30 – 11:50: Guggiana-Nilo, Drago  
Color signal processing in the zebrafish brain: RGCs and Tectum

----- Lunch -----

**Breakout Sessions – free time**

----- Dinner -----

- 21:00 – 22:00:**        **plenary lecture**  
**Kevan Martin**        **Montecastelli's got talent**

# **Wednesday**

**(Chair: Haleh Fotowat)**

- 9:00 – 9:20: Kawakami, Koichi  
Enhancer trapping and calcium imaging reveal functional neuronal circuitries essential for fish behaviors.
- 9:20 – 9:40: Herrera, Kristian  
TBD
- 9:40 – 10:00: Kuchibhotla, Kishore  
TBD

----- Break -----

- 10:30 – 10:50: Lopez-Schier, Hernan  
Bidirectional tuning and ambiguity resolution in a mechanosensory system
- 10:50 – 11:10: Migault, Geoffrey  
TBD
- 11:10 – 11:30: Okamoto, Hitoshi  
TBD
- 11:30 – 11:50: Oteiza, Pablo  
Lateral-line dependent behavior in larval zebrafish

----- Lunch -----

**Breakout Sessions – free time**

----- Dinner -----

**21:00 – 22:00:**

**Concert  
Philipp Bonhoeffer**

# **Thursday**

**(Chair: Drago Guggiana)**

- 9:00 – 9:20: Naumann, Eva  
Neural Basis of Individuality
- 9:20 – 9:40: Odstreil, Iris  
TBD
- 9:40 – 10:00: Judkewitz, Benjamin and/ or Schulze, Lisanne  
TBD

----- Break -----

- 10:30 – 10:50: Skutt-Kakaria, Kyobi  
TBD
- 10:50 – 11:10: Wolf, Sebastien  
TBD
- 11:10 – 11:30: Zwaka, Hanna  
TBD
- 11:30 – 11:50: Hideyuki Tanabe  
The study of hippocampal functions in zebrafish

----- Lunch -----

**Locate to Romitorio – discussion groups**

**Pizza Party**

----- Dinner -----

**21:00 – 22:00: Violin lecture- About the violin**

**Friday**

Departure



### Confirmed Speakers – Titles of talks:

Bahl, Armin	TBD
Bianco, Isaac	TBD
Bormuth, Volker	TBD
Cury, Kevin	A Neural Circuit that Coordinates Egg Laying in Drosophila
deBivort, Benjamin	The hunt for loci of individuality: Ca <sup>++</sup> correlates of individual behavioral bias
Debregeas, Georges	TBD
del Bene, Filippo	TBD
Du, Jiulin	TBD
Dunn, Tim	Deep Learning for Connectomics?
Engert, Florian	Fish Feelings
Fotowat, Haleh	Habituation to looming stimuli in larval zebrafish
Guggiana-Nilo, Drago	Color signal processing in the zebrafish brain: RGCs and Tectum
Haesemeyer, Martin	Heat sensation in larval zebrafish
Herrera, Kristian	TBD
Hong, Kate	The role of barrel cortex in sensory detection: a study in transient vs chronic inactivation of S1
Horstmeyer, Roarke	A microscope array for imaging over an unbounded field-of-view with cellular-scale resolution
Huang, Kuo-Hua	Two-photon calcium imaging in the forebrain of adult zebrafish during virtual navigation
Hübener, Mark	TBD
Josch, Max	TBD
Judkewitz, Benjamin	TBD
Kawakami, Koichi	Enhancer trapping and calcium imaging reveal functional neuronal circuitries essential for fish behaviors
Keller, Georg	In proving foresight may be vain: the best-laid schemes o' mice an' men - gang aft agley
Kuchibhotla, Kishore	TBD
Lopez-Schier, Hernan	Bidirectional tuning and ambiguity resolution in a mechanosensory system
Martin, Kevan	Montecastelli's Got Talent...
Migault, Geoffrey	TBD
Naumann, Eva	Neural Basis of Individuality
Odstrcil, Iris	TBD
Okamoto, Hitoshi	TBD
Schulze, Lisanne	TBD
Skutt-Kakaria, Kyobi	TBD
Wolf, Sebastien	TBD
Zwaka, Hanna	TBD
Hildebrand, David	TBD
Oteiza, Pablo	Lateral-line dependent behavior in larval zebrafish
Hideyuki Tanabe	The study of hippocampal functions in zebrafish
Portuges, Ruben	TBD