Circuits and Behavior in Tuscany

Dates: 06/19/2016 – 06/24/2016

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

Schedule

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

Sunday

12:00 – 17:00: **Arrival**

18:30 – 20:00: **Dinner**

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

Monday

9:00 – 11:30 (Chair: Josua Jordi)

9:00 – 9:20 Attinger, Alexander
Visuomotor coupling shapes the functional development of mouse visual cortex
9:20 – 9:40 Bormuth, Volker
Whole-brain activity mapping of VOR with light-sheet microscopy
9:40 – 10:00 deBivort, Benjamin
Modeling locomotor bias and individual variation in a Drosophila pre-motor circuit

---------- Break ----------

10:30 – 10:50: Kyobi Sutt-Kakaria
TBD
10:50 – 11:10: Dunn, Tim
Snell's transformation of images in water
11:10 – 11:30: Fotowat, Haleh
Navigation in weakly electric fish

---------- **Lunch** ----------

15:00 – 16:00: (Chair: Timothy Dunn)

15:00 – 15:20: Gebhardt, Christoph
Anatomy and function of an inter-hemispheric neural circuit in the zebrafish optic tectum
15:20 – 15:40: Guggiana-Nilo, Drago
Color vision in Zebrafish
15:40 – 16:00: Hildebrand, David
Whole-brain serial-section electron microscopy in larval zebrafish

---------- Break ----------

16:30 – 16:50: Jordi, Josua
Large-scale chemical- and multi-behavioral profiling identifies novel, specific appetite and satiation stimulants.
16:50 – 17:10: Wee, Caroline
Flexible control of social and non-social behavior by the zebrafish oxytocin circuitry
17:10 – 17:30: Reggiani, Jasmin
Functional characterization of retinal ganglion cell populations in the mouse

---------- **Dinner** ----------

21:00 – 22:00: plenary lecture
Lichtman, Jeff Does connectomics make sense?

Tuesday

(Chair: Haleh Fotowat)

9:00 – 9:20: Lambert, Aaron
Dissociable and state-dependent receptor-specific dopaminergic contributions to spontaneous and goal-directed repertoires in predatory zebrafish

9:20 – 9:40 Lefler, Yaara
Computation of instinctive defensive behaviours in the mouse midbrain

9:40 – 10:00 Leonardo, Anthony
Neural components of an internal model

---------- Break ----------

10:30 – 10:50: Miller, Andrew
Infra-slow neural oscillations in the larval zebrafish

10:50 – 11:10: Naemeka, Onyeka
A web based atlas for the larval zebrafish brain

11:10 – 11:30: Naumann, Eva
From whole-brain data to functional circuit models: the zebrafish optomotor response

---------- **Lunch** ----------

Breakout Sessions – free time

18:30 – 20:00: ---------- **Dinner** ----------

21:00 – 22:00: **Concert**

Wednesday

(Chair: Hana Zwaka)

9:00 – 9:20: Wigderson, Eyal
Early multisensory integration of self and source motion in the auditory system.
9:20 – 9:40: Zylbertal, Asaph
Infra-slow network activity
9:40 – 10:00: Ahrens, Misha
TBD

---------- Break ----------

10:30 – 10:50: Tanabe, Hideyuki
The study of hippocampus function in zebrafish
10:50 – 11:10: Ailani, Deepak
Functional imaging of the hypothalamus in fixed and free swimming zebrafish
11:10 – 11:30: Kostadinov, Dimitar
Sensorimotor integration in the cerebellum

---------- **Lunch** ----------

Breakout Sessions – free time

18:30 – 20:00: ---------- **Dinner** ----------

21:00 – 22:00: **plenary lecture**
Keller, Georg: Learning to see

Thursday

(Chair: Eva Naumann)

9:00 – 9:20: Wolf, Sebastien
Visual modulation of eyes saccades dynamics
9:20 – 9:40: Zwaka, Hanna
A virtual environment assay for learning in honeybees
9:40 – 10:00: Ramdya, Pavan
The neurogenetic mechanisms of collective behavior in Drosophila

---------- Break ----------

10:30 – 10:50 Robert Johnson
Building a Framework to Predict Zebrafish Behavior
10:50 – 11:10: Eagon Meng
Epistemology in neuroscience
11:10 – 11:30: Hernan Lopez-Schier
Vectorial mechanosensation in zebrafish
---------- **Lunch** ----------

Locate to Romitorio – discussion groups

Pizza Party

21:00 – 22:00: plenary lecture
Bonhoeffer, Philipp TBD

Friday

Departure

Confirmed Speakers – Titles of talks:

Ahrens, Misha	TBD
Ailani, Deepak	Functional imaging of the hypothalamus in fixed and free swimming zebrafish
Attinger, Alexander	Visuomotor coupling shapes the functional development of mouse visual cortex
Bonhoeffer, Philipp	TBD
Bormuth, Volker	Whole-brain activity mapping of VOR with light-sheet microscopy
deBivort, Benjamin	Modeling locomotor bias and individual variation in a Drosophila pre-motor circuit
Dunn, Tim	Snell's transformation of images in water
Engert, Florian	TBD
Fotowat, Haleh	Navigation in weakly electric fish
Gebhardt, Christoph	Anatomy and function of an inter-hemispheric neural circuit in the zebrafish optic tectum
Guggiana-Nilo, Drago	Color vision in Zebrafish
Hildebrand, David	Whole-brain serial-section electron microscopy in larval zebrafish
Johnson, Rob	TBD
Jordi, Josua	Large-scale chemical- and multi-behavioral profiling identifies novel, specific appetite and satiation stimulants
Keller, Georg	Learning to see
Kostadinov, Dimitar	Sensorimotor integration in the cerebellum
Lambert, Aaron	Modulation of swim behavior by dopamine signaling
Lefler, Yaara	Computation of instinctive defensive behaviours in the mouse midbrain
Leonardo, Anthony	Neural components of an internal model
Lichtman, Jeff	Does connectomics make sense?
Lopez-Schier, Hernan	TBD
Meng, Eagon	TBD
Miller, Andrew	Infra-slow neural oscillations in the larval zebrafish
Naemeka, Onyeka	A web based atlas for the larval zebrafish brain
Naumann, Eva	From whole-brain data to functional circuit models: the zebrafish optomotor response
Ramdya, Pavan	The neurogenetic mechanisms of collective behavior in Drosophila
Reggiani, Jasmin	Functional characterization of retinal ganglion cell populations in the mouse
Tanabe, Hideyuki	The study of hippocampus function in zebrafish
Wee, Caroline	Flexible control of social and non-social behavior by zebrafish oxytocin circuitry
Wigderson, Eyal	Early multisensory integration of self and source motion in the auditory system.
Wolf, Sebastien	Visual modulation of eyes saccades dynamics
Zwaka, Hanna	A virtual environment assay for learning in honeybees
Zylbertal, Asaph	Infra-slow network activity