Monday 12th

starting from 14.00

Conference Room 0 floor

Theoretical session on super-resolution, nanoscopy and other advanced methods in linear and non linear excitation optical microscopy.

- **Prof. Alberto Diaspro,** IIT, Genova, Italy
  Introduction

Nikon Invited lecturer:

- **Prof. Peter Saggau**, *Dept. Neuroscience*
  Baylor College of Medicine, Houston, Texas, USA
  Advanced Optical Imaging for Reverse-Engineering the Brain

- **Benjamin Harke** IIT, Genova, Italy
  STED nanoscopy

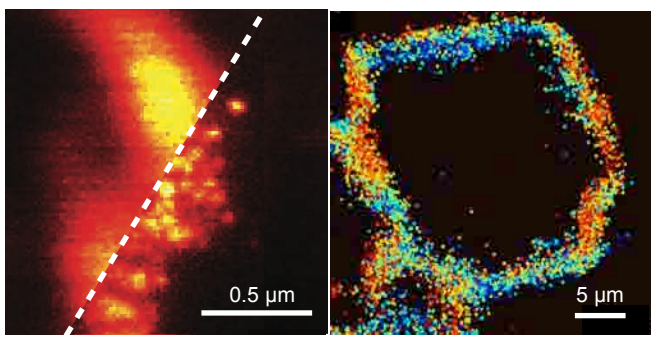
- **Francesca Cella Zanacchi,** IIT, Genova, Italy
  Stochastic approaches to nanoscopy

- **Paolo Bianchini,** IIT, Genova, Italy
  2PE-STED nanoscopy

- **Giuseppe Vicidomini,** IIT, Genova, Italy
  STED nanoscopy by time gating

Instructors: Peter Saggau, Francesca Cella Zanacchi, Zeno Lavagnino, Benjamin Harke, Jenu Chacko, Paolo Bianchini, Silvia Galiani, Giuseppe Vicidomini, Marco Scotto d'Abbusco, Mattia Pesce.

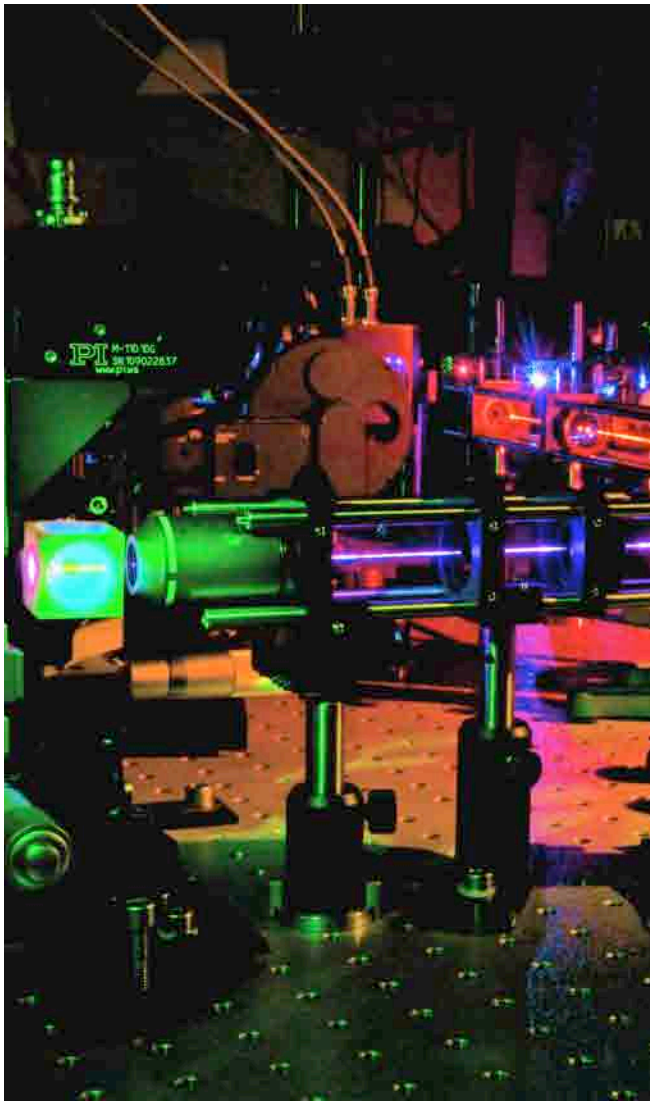
Acknowledgements



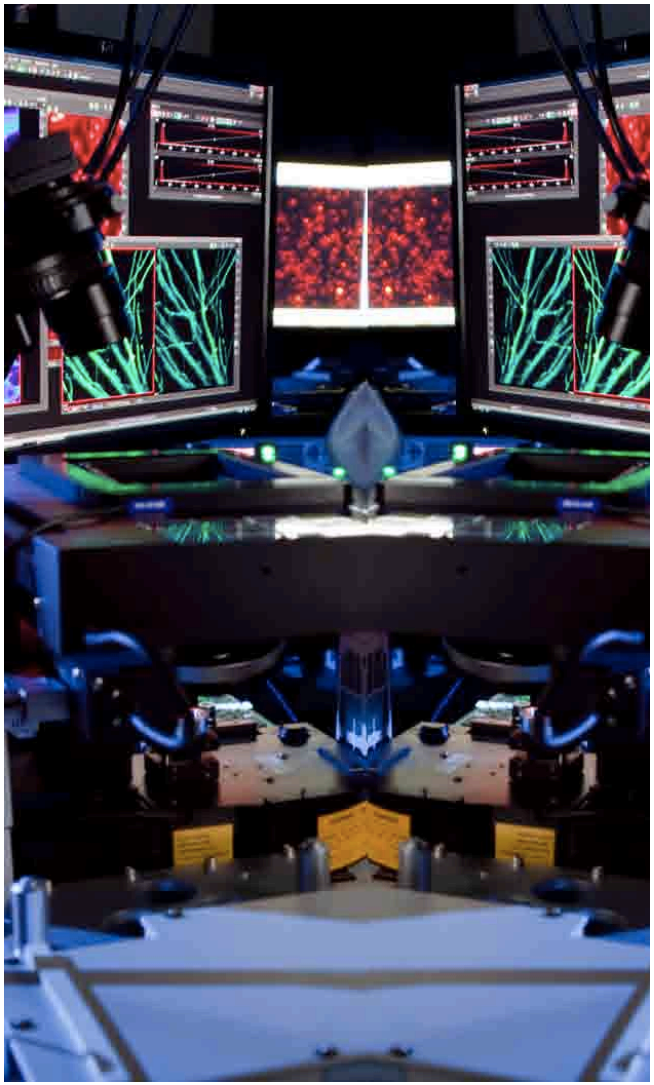
1st IIT International Practical Course on Advanced Optical Microscopy Methods

12th - 16th December 2011

Istituto Italiano di Tecnologia, Genova, Italia



Program



Tuesday 13th to Thursday 15th

Diaspro labs

Practical sessions on instruments:

S1: Nikon A1 spectral confocal (Floor 5)
S2: Fast Confocal Andor Revolution® XD (Floor -1) + Leica TCS SP5 resonant scanner (Floor 2)
S3: Leica TCS STED-CW + 2PE (Floor -1)
S4: SPIM (Floor -1)
S5: Nikon multicolor 3D N-STORM (Floor -1)
S6: Nikon A1R MP Multiphoton + STED (Floor -1)
S7: Discussion (Floor -1)

		S1	S2	S3	S4	S5	S6	S7
Tue 13th	9.00 - 11.00	A	B	C	D	E	F	G
	11.00 - 13.00	B	C	D	E	F	G	A
	14.30 - 16.30	C	D	E	F	G	A	B
	16.30 - 18.30	D	E	F	G	A	B	C
Wed 14th	9.00 - 11.00	E	F	G	A	B	C	D
	11.00 - 13.00	F	G	A	B	C	D	E
	14.30 - 16.30	G	A	B	C	D	E	F
	16.30 - 18.30	A	B	C	D	E	F	G
Thu 15th	9.00 - 11.00	B	C	D	E	F	G	A
	11.00 - 13.00	C	D	E	F	G	A	B
	14.30 - 16.30	D	E	F	G	A	B	C
	16.30 - 18.30	E	F	G	A	B	C	D

Friday 16th

Fri 16th	9.00 - 11.00	F	G	A	B	C	D	E
	11.00 - 13.00	G	A	B	C	D	E	F

Conclusions and farewell cocktail at 13.00

Reference books:

- Nanoscopy and Multidimensional Optical Fluorescence Microscopy, Taylor &Francis Group, A Chapman & Hall Book Crc Press (2010)
- Optical Fluorescence Microscopy: from the spectral to the nano dimension, Springer-Verlag, Berlin and Heidelberg GmbH & Co. K., (2010)
- Confocal and Two- Photon Microscopy: Foundations, Applications and Advances, Wiley-Liss (2001)