

Concluding remarks

Cecilia Laschi

RoboSoft CA Coordinator

THE BIOROBOTICS
INSTITUTE



Scuola Superiore
Sant'Anna

The BioRobotics Institute
Scuola Superiore Sant'Anna



First Community Plenary Meeting
March 31 – April 1, 2014
Scuola Superiore Sant'Anna, Pisa, Italy

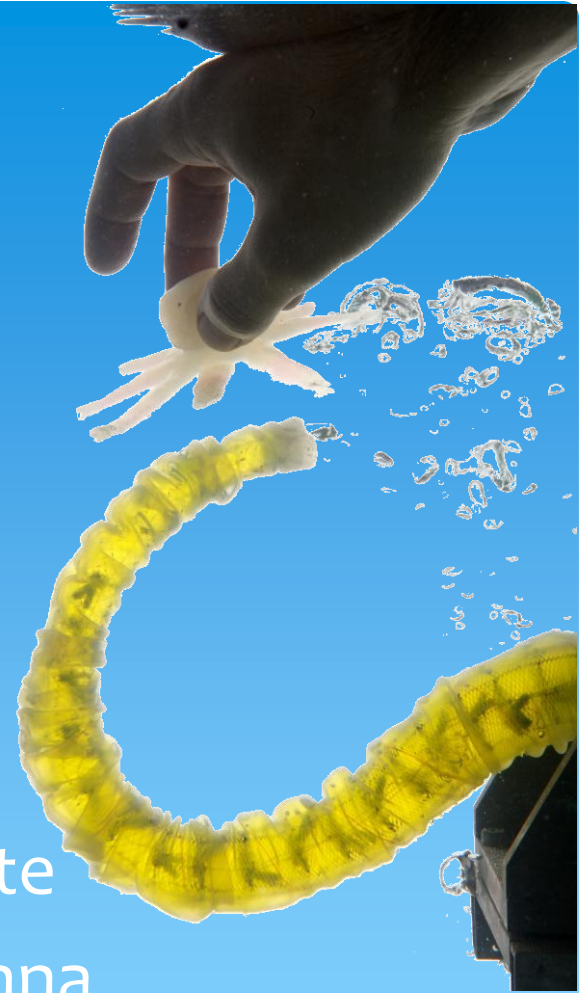
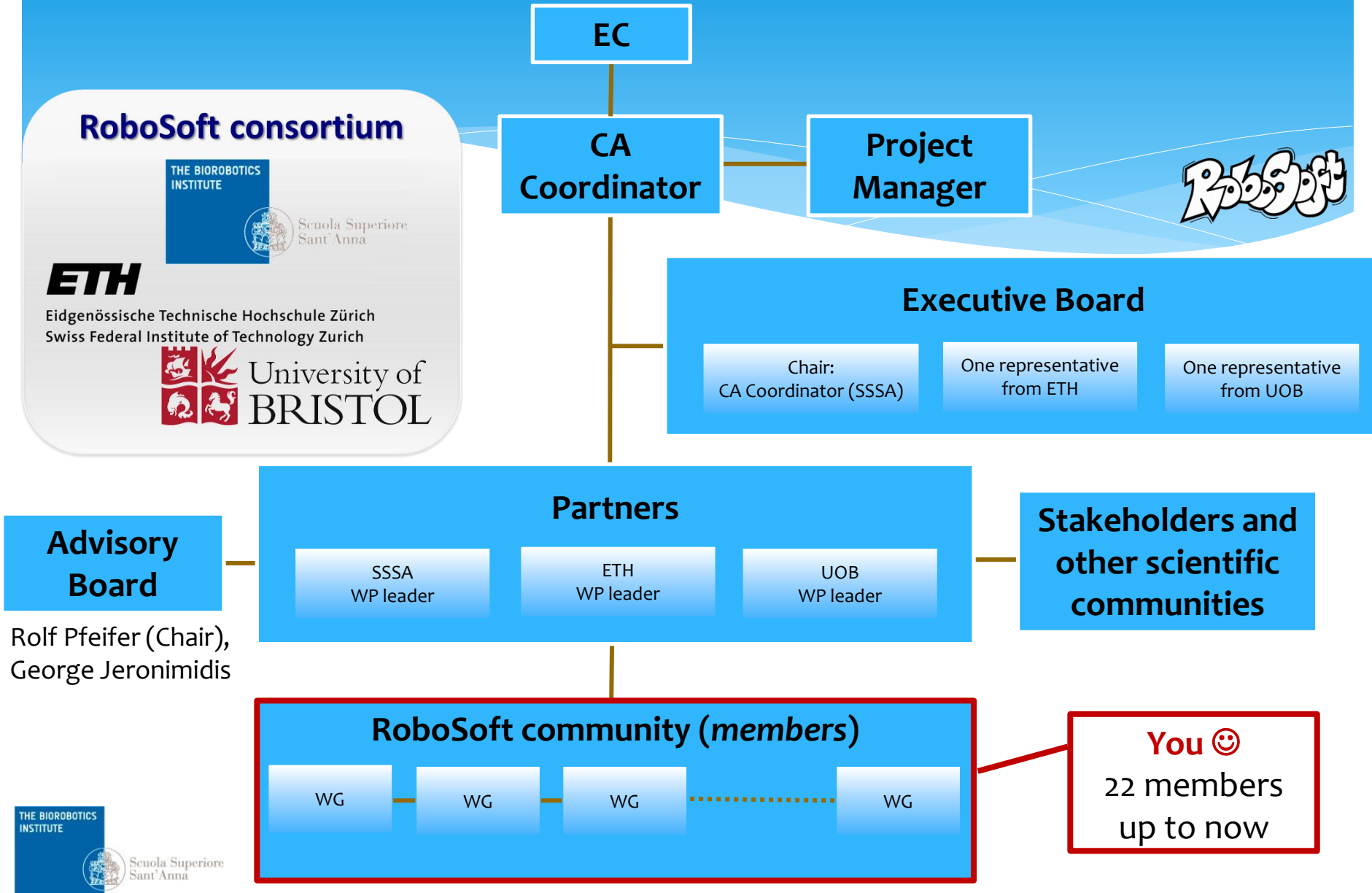
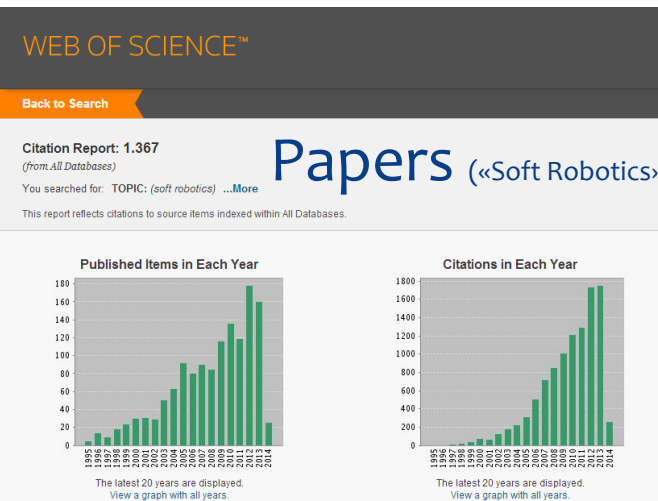
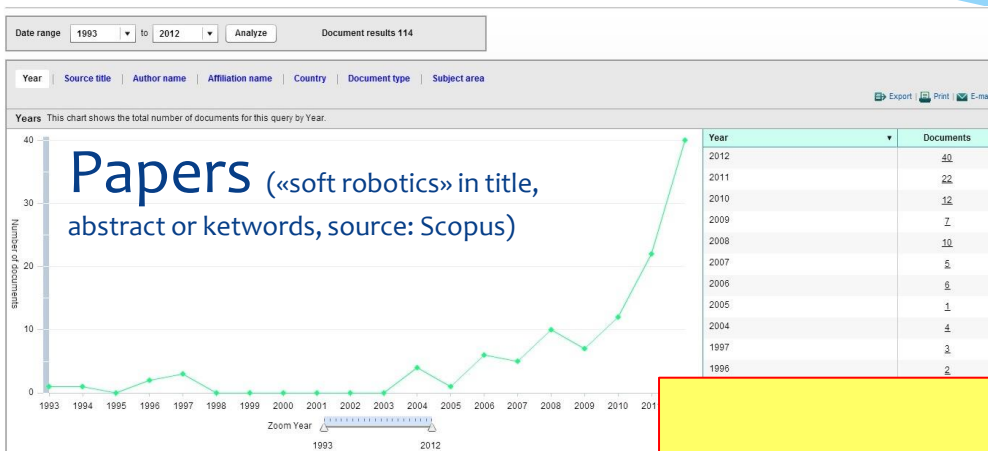


Image: Massimo Brega, The Lighthouse

RoboSoft CA structure



Soft Robotics: a growing research field at international level



Let's keep the trend!

Results found: 1367

Sum of the Times Cited [?]: 10433

Sum of Times Cited without self-citations [?]: 9590

Citing Articles: [?]: 856*

Citing Articles without self-citations [?]: 8190

Average Citations per Item [?]: 7.63

h-index [?]: 48



Editor-in-Chief: Barry A. Trimmer

Special issue on "Soft Robotics" of *Advanced Robotics* 26(7), 2012

* Special issue on "Soft Robotics" of *Actuators*

Soft Robotics applications

Robot



Biomedical applications:
endoscopy, assistance to
elderly and disabled people

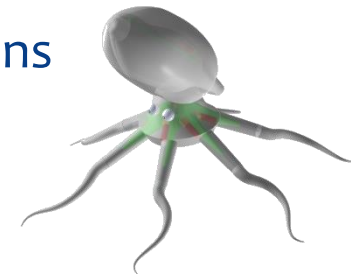
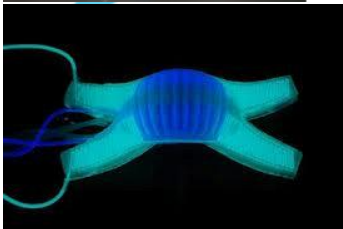
Realistic
simulators of
body parts

More to
come!

The initial challenge:
can we build robots
with soft materials?

Manufacturing,
Agriculture

Marine
applications



Soft Robotics: a growing research field at international level

IEEE.org | IEEE Xplore Digital Library | IEEE Standards | IEEE Spectrum | More Sites

Sign in



- * RAS TC on Soft Robotics
- * Co-Chairs: Fumiya Iida, Cecilia Laschi, Akio Ishiguro, Robert Wood



About RAS

Member Communities

Conferences & Workshops

Publications

Technical Committees

Education, Outreach & Career

Awards & Recognition

Industry & Government

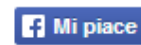
Search RAS Website



Latest News:



Follow:



Join RAS

HOME > SOFT ROBOTICS

Soft Robotics

Activities

Contact

Join Us

[Back to Technical Committees](#)

Soft Robotics

Scope:

There has been an increasing interest in the use of soft and deformable structures in the robotic systems. Soft and deformable structures are crucial in the systems that deal with uncertain and dynamic task-environments, e.g. grasping and manipulation of unknown objects, locomotion in rough terrains, and physical contacts with living cells and human bodies. Moreover the investigations on soft materials are also necessary for more visionary research topics such as self-repairing, growing, and self-replicating robots. Despite its importance and considerable demands, the field of Soft Robotics faces a number of fundamental scientific challenges: the studies of unconventional materials are

<http://www.softrobotics.ethz.ch>



Objective ICT-2013.9.1

Challenging current thinking



Expected impact

For CSA actions:

- catalyse transformative effects on the communities and practices for high-risk and high-impact research and on the mechanisms to support the global nature of such research;
- new, engaged and risk-taking research communities prepared to develop new and non-conventional approaches for addressing future challenges in science and society.

Please do not forget ;-)

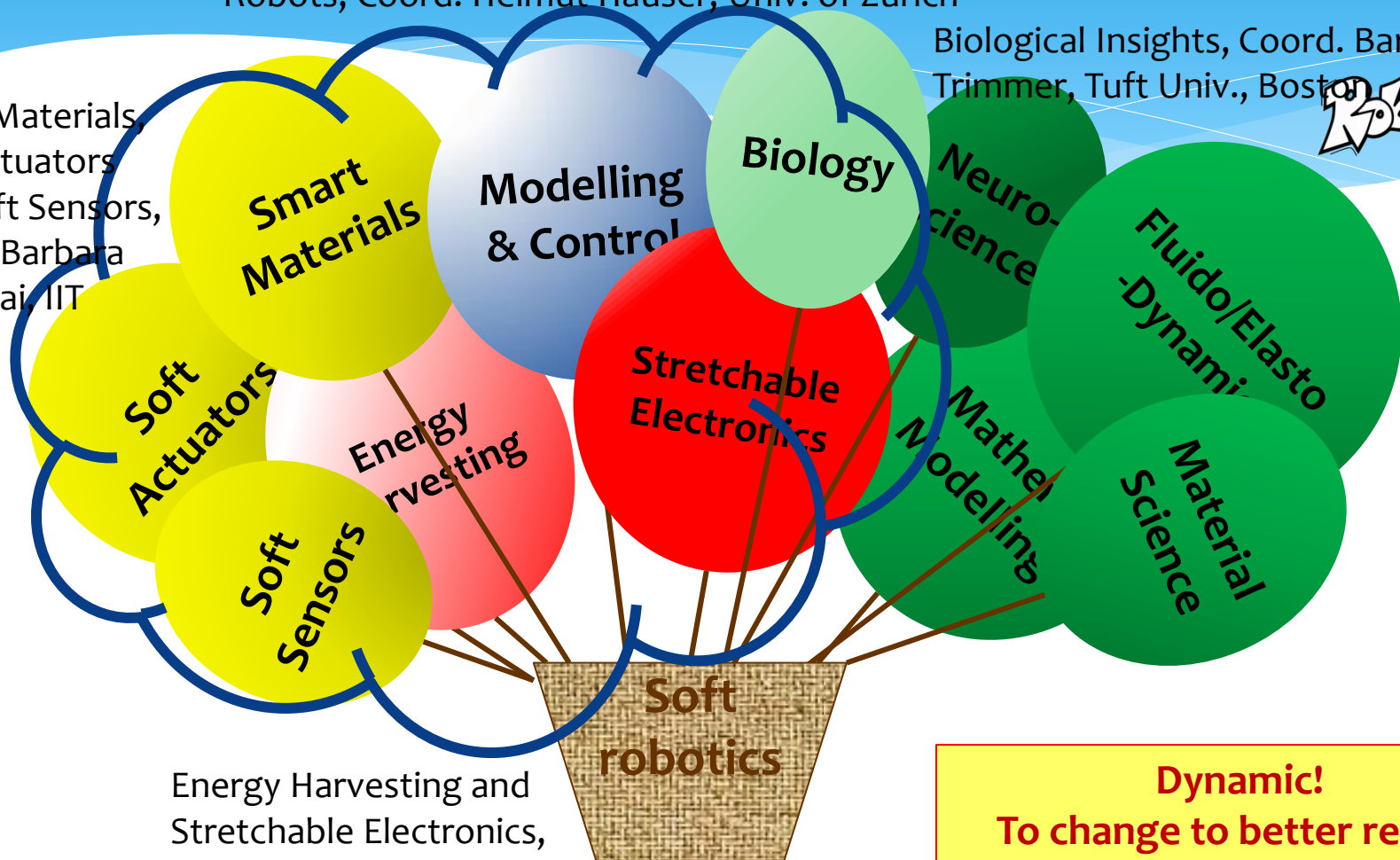
RoboSoft Working Groups (D2.2)

Control Architectures and Paradigms for Soft Robots, Coord. Helmut Hauser, Univ. of Zurich

Biological Insights, Coord. Barry Trimmer, Tuft Univ., Boston



Smart Materials, Soft Actuators and Soft Sensors, Coord. Barbara Mazzolai, IIT



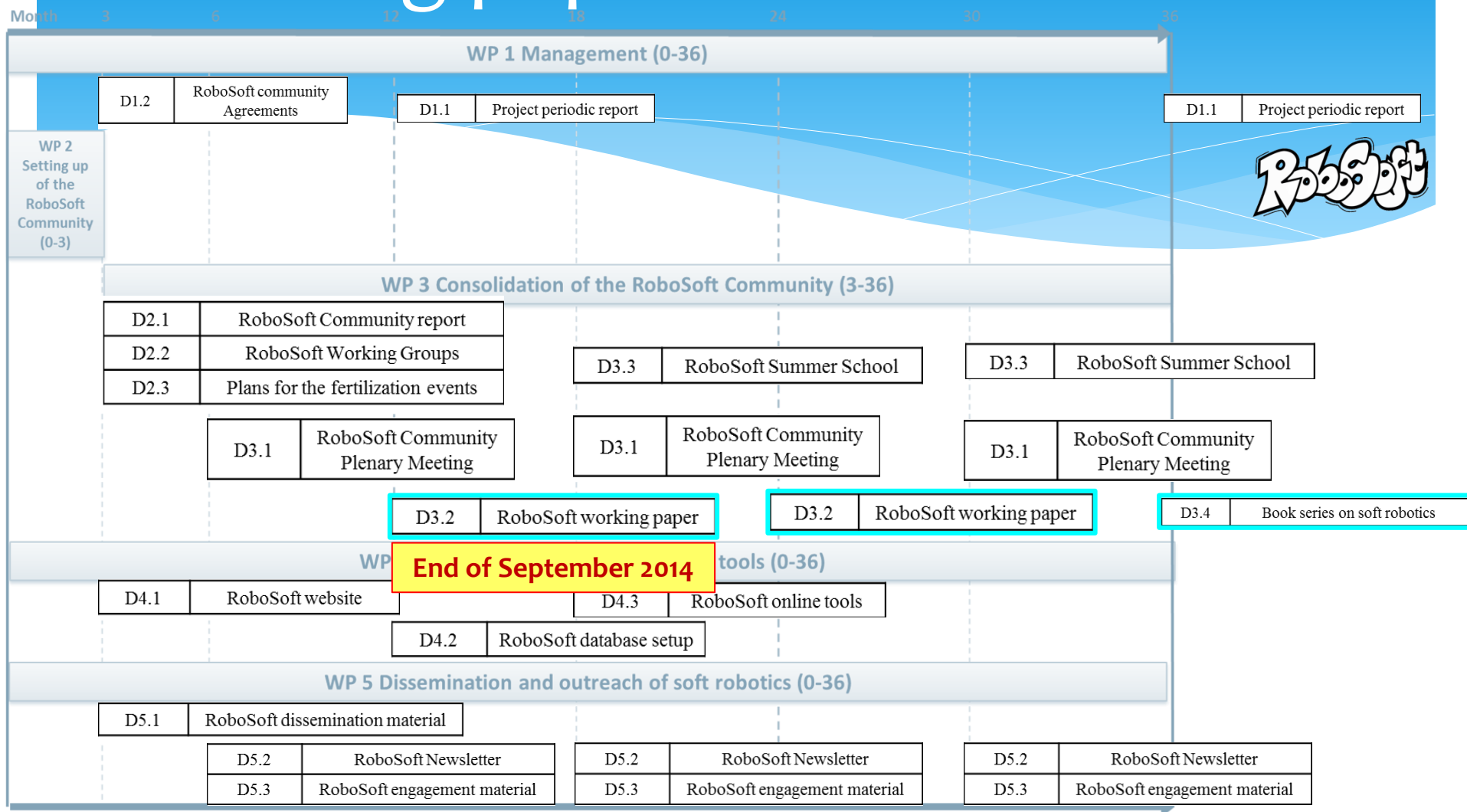
Energy Harvesting and Stretchable Electronics, Coord. Jamie Paik, EPFL

Dynamic!
To change to better reflect scientific and technological progress and challenges

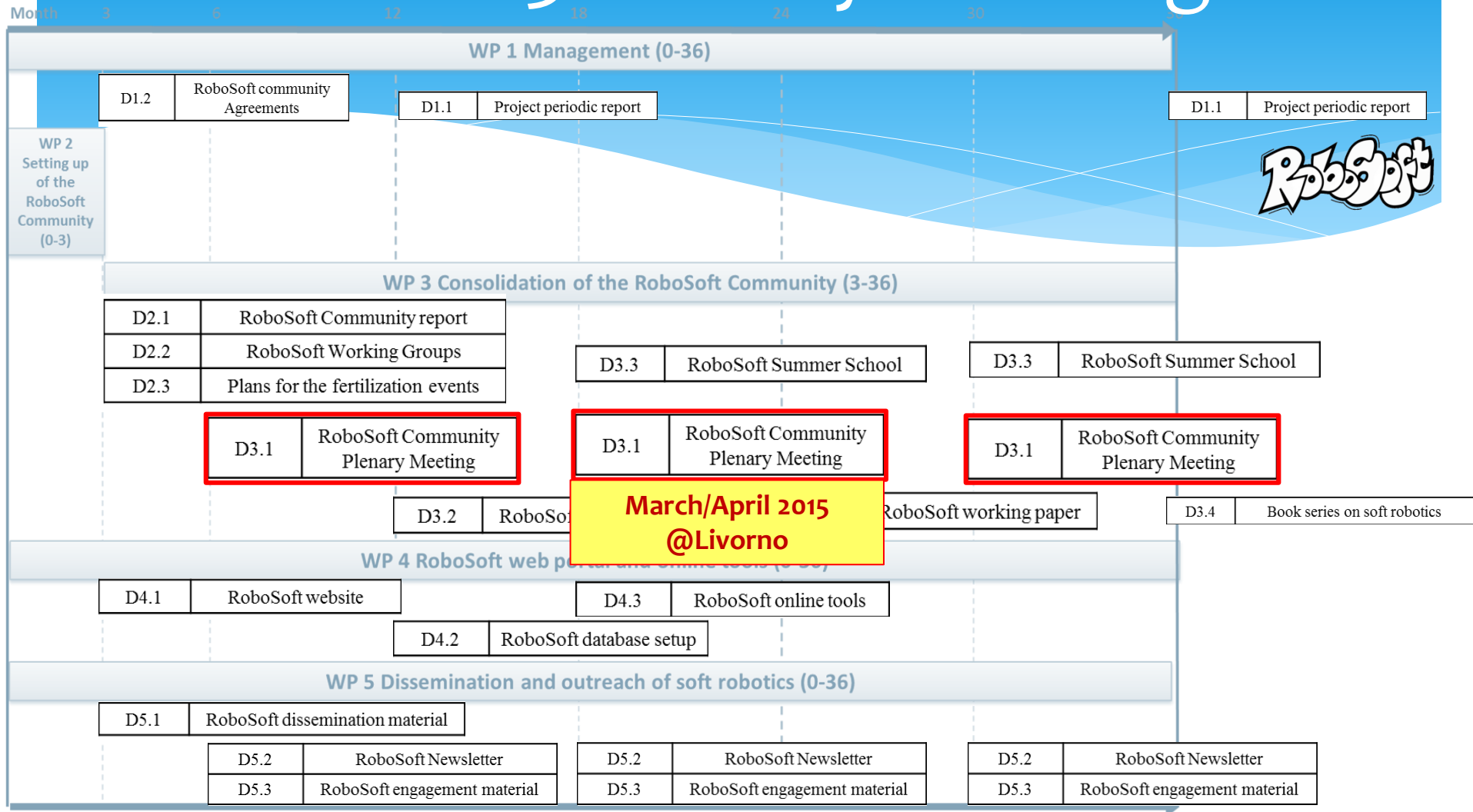
What's next?



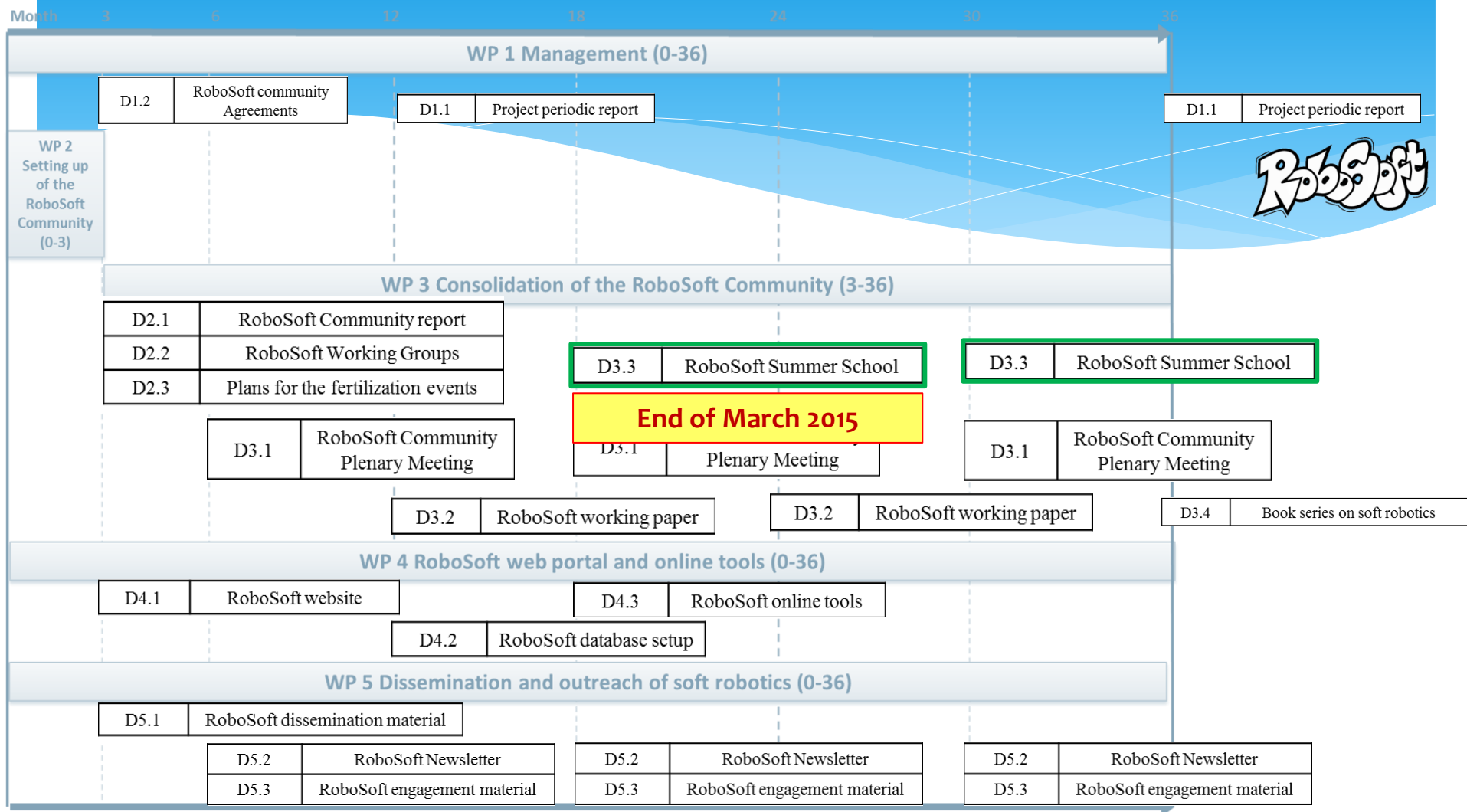
Working papers and book series



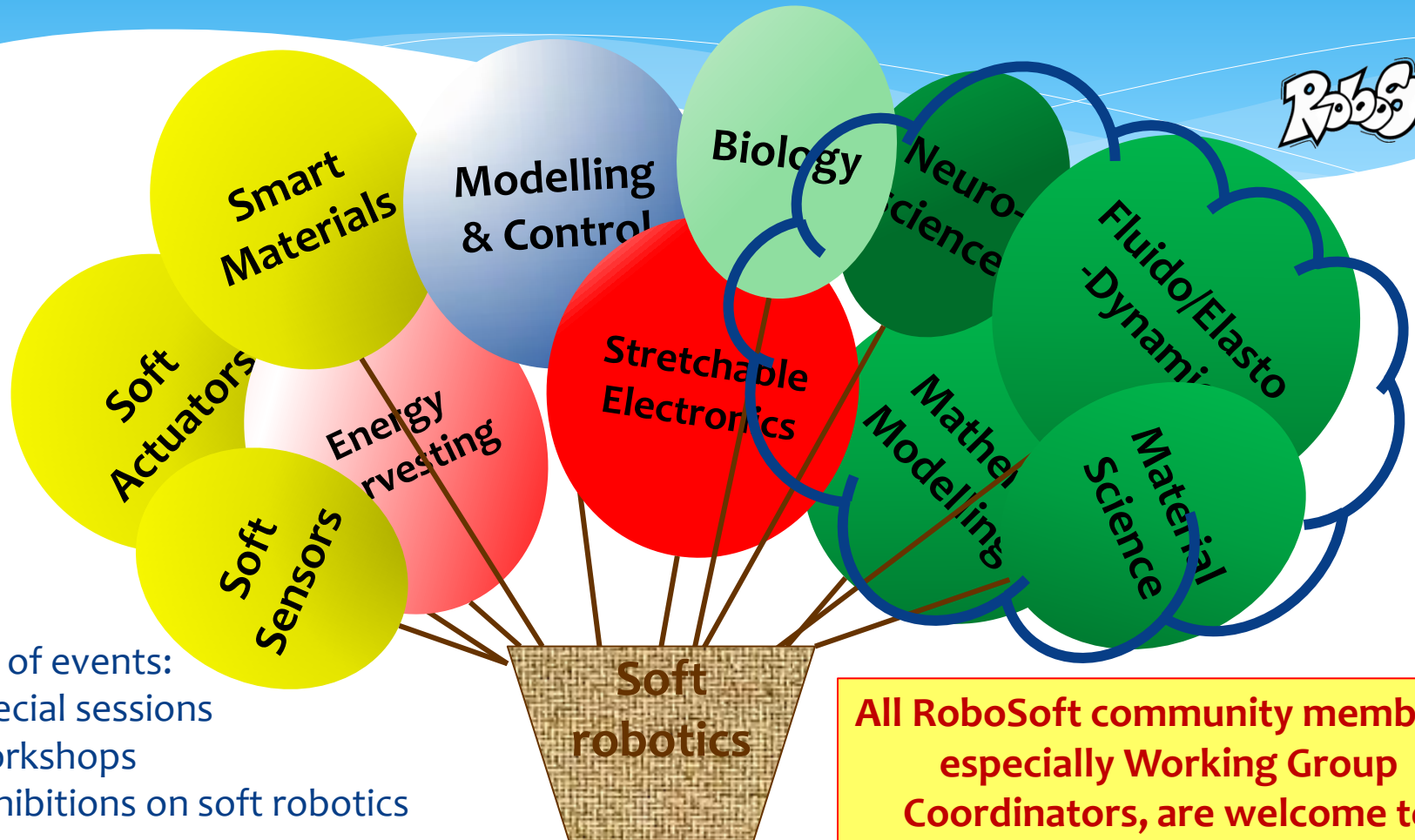
Events: 3 Plenary Meetings



Events: 2 Summer Schools



Plan for fertilization events (D2.3)

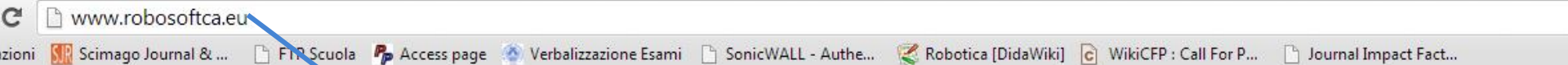


Types of events:

- * special sessions
- * workshops
- * exhibitions on soft robotics

All RoboSoft community members, especially Working Group Coordinators, are welcome to propose and carry out fertilization events, with RoboSoft funds

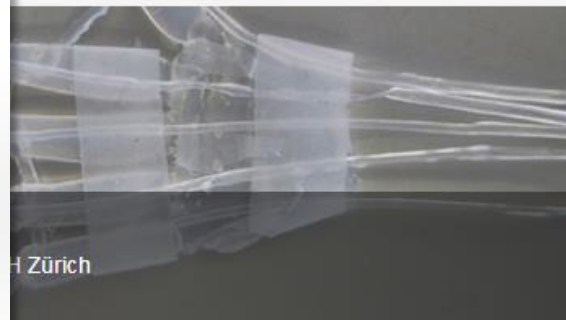
Stay tuned!



www.robosoftca.eu

**RoboSoft Coordination
Action on Facebook**

**The Newsletter of RoboSoft
Coordination Action for Soft Robotics**



boSoft

Action for Soft Robotics funded by the European
Culture and Emerging Technologies - FET- Open
Project # 619319).

User Account

Username Password

Log in Register

☐ Remember me

Like!



Robosoft Coordination Action

Like

39 people like Robosoft Coordination Action.

RoboSoft CA

“A Coordination Action for Soft Robotics”

First Community Plenary Meeting

March 31 – April 1, 2014

Scuola Superiore Sant'Anna, Pisa, Italy



Thank you for coming!



A Coordination Action for Soft Robotics

FP7, THEME ICT-2013.9.1 “Challenging current Thinking”, FET-Open