

CERN, 26-28 November 2018



Welcome to the 33rd RD50 Workshop

Radiation hard semiconductor devices
for very high luminosity colliders



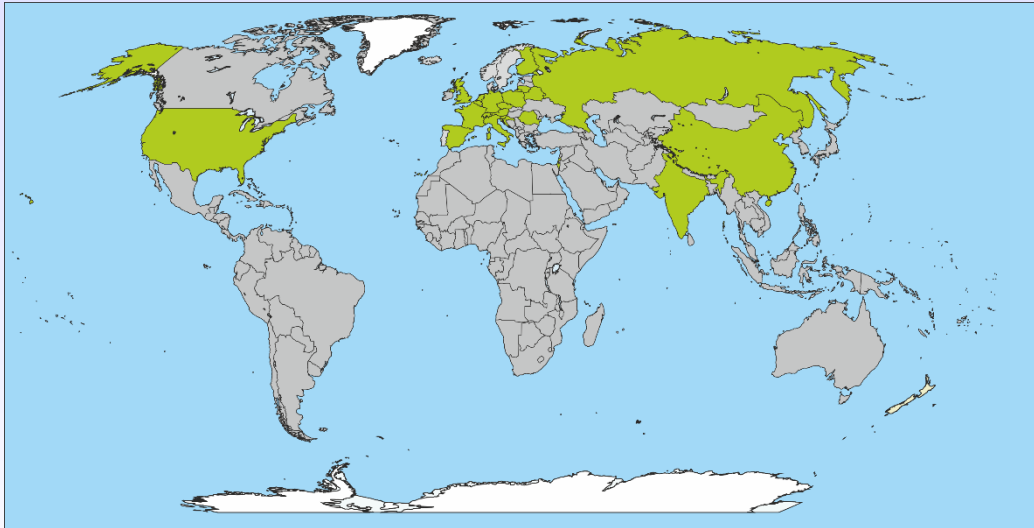
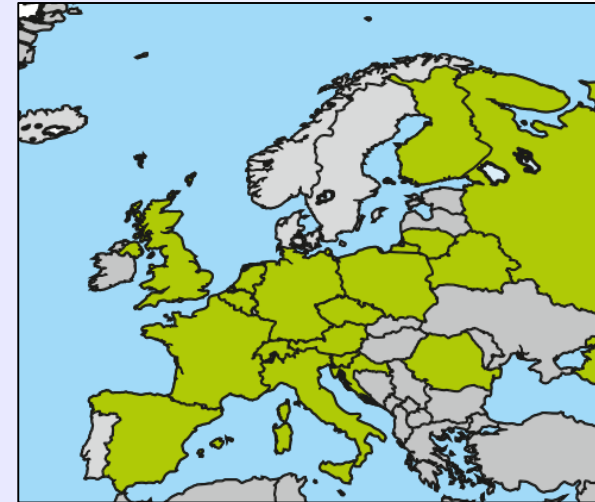
30th RD50 Workshop
Krakow, Poland, June 2017

32nd RD50 Workshop
Hamburg, Germany, June 2017

- **RD50: 62 institutes and 367 members**

52 European institutes

Austria (HEPHY), **Belarus** (Minsk), **Czech Republic** (Prague (3x)), **Finland** (Helsinki, Lappeenranta), **France** (Paris, Orsay), **Germany** (**Bonn**, Dortmund, Erfurt, Freiburg, **Goettingen**, Hamburg (2x), Karlsruhe, Munich(2x)), **Italy** (Bari, Perugia, Pisa, Trento, Torino), **Croatia** (Zagreb), **Lithuania** (Vilnius), **Netherlands** (NIKHEF), **Poland** (Krakow, Warsaw(2x)), **Romania** (Bucharest (2x)), **Russia** (Moscow, St.Petersburg), **Slovenia** (Ljubljana), **Spain** (Barcelona(3x), Santander, Sevilla (2x), Valencia), **Switzerland** (CERN, PSI, Zurich), **United Kingdom** (Birmingham, Glasgow, Lancaster, Liverpool, **Manchester**, Oxford, RAL)



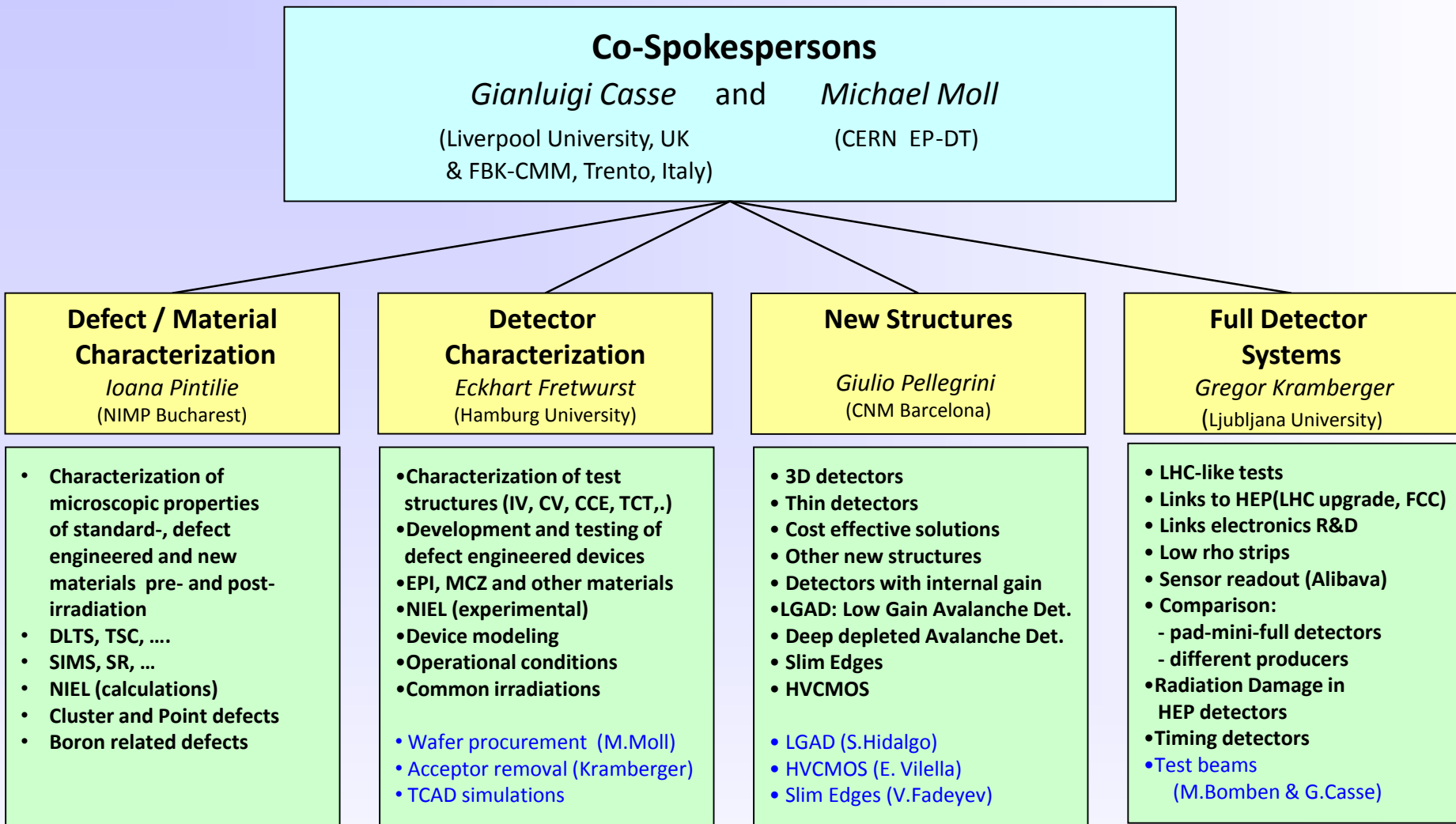
7 North-American institutes

USA (BNL, Brown Uni, Fermilab, LBNL, New Mexico, Santa Cruz, Syracuse)

1 Middle East institute; Israel (Tel Aviv)

2 Asian institute; China(**Beijing**), **India** (Delhi)

Detailed member list:
<http://cern.ch/rd50>

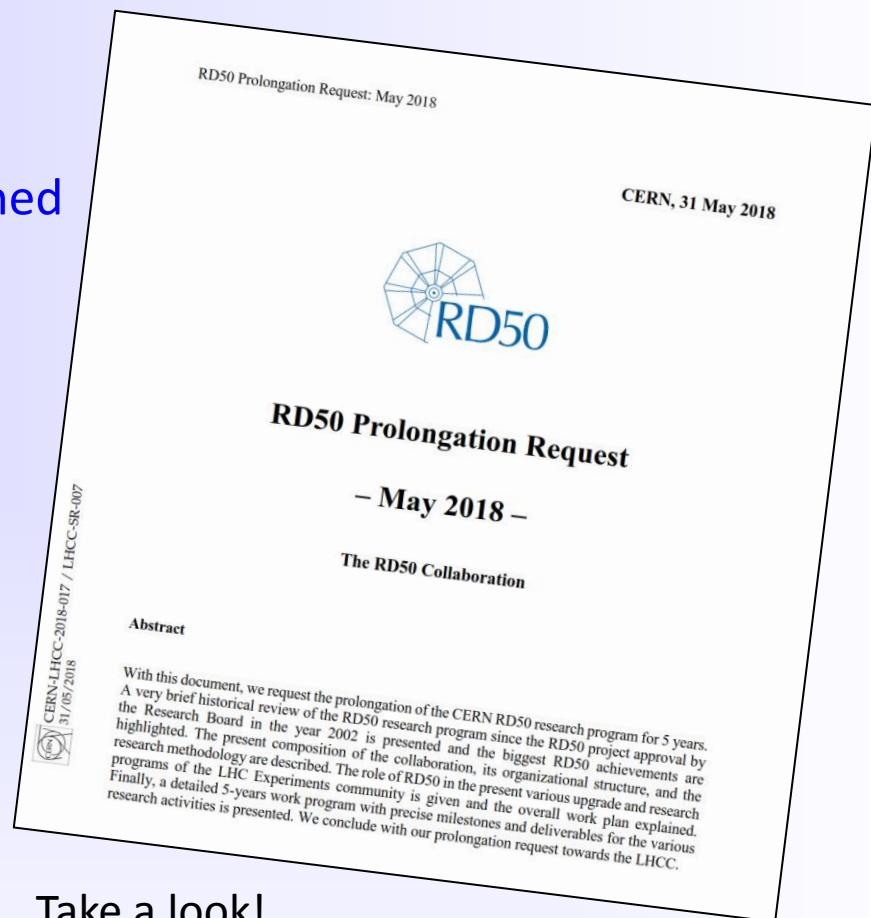


*Collaboration Board Chair & Deputy: G.Kramberger (Ljubljana) & J.Vaitkus (Vilnius), Conference committee: U.Parzefall (Freiburg)
 CERN contact: M.Moll (EP-DT), Secretary: V.Wedlake (EP-DT), Budget holder & GLIMOS: M.Moll & M.Glaser (EP-DT)*

- 2018: LHCC (Large Hadron Collider Committee) reviewed CERN RD experiments, i.e. also RD50
- May 2018: RD50 produced a 5 year work plan
- June 2018: Very positive feedback from LHCC
- July 2018: Research Board Minutes published

RB Minutes: RD50 (Development of Radiation Hard Semiconductor Devices for Very High Luminosity Colliders) [6] is recommended by the LHCC for the requested five-year extension, including CERN support at the level currently provided (access to facilities, human resources) which is crucial for the collaboration. Progress will be reviewed every year by the LHCC. The LHCC considers the structure of RD50, with a small but focussed core team and corresponding infrastructure at CERN, and many expert collaborators from around the world, to be an excellent setup. **The Research Board extended RD50 for a further five years.**

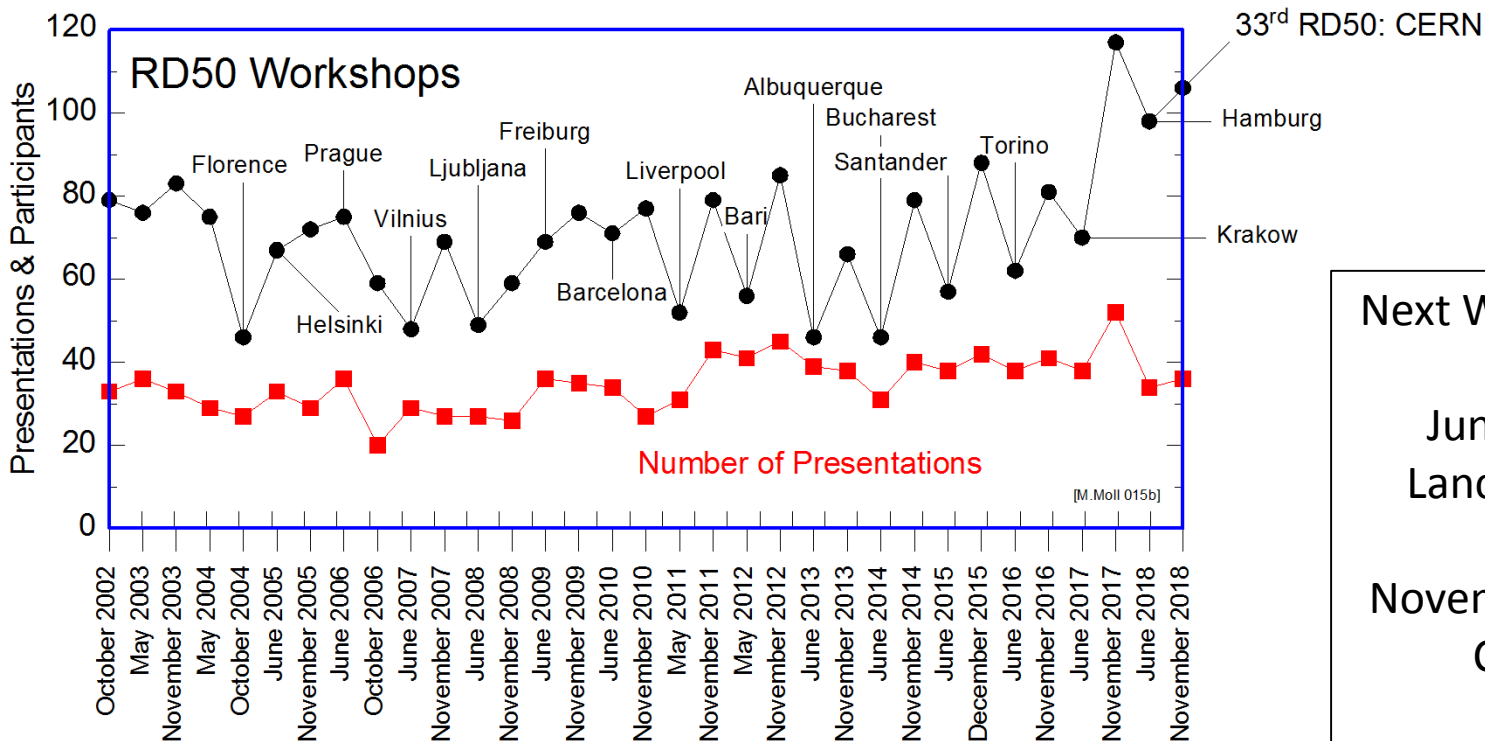
<http://cds.cern.ch/record/2622164/files/M-225.pdf>



Take a look!

....and make this program happen!

<https://cds.cern.ch/record/2320882/files/LHCC-SR-007.pdf>



This workshop

Next Workshops:

June 2019
Lancaster, UK

November 2019
CERN

June 2020
Zagreb, Croatia

- **More than 100 participants**

- 106 participants
- approx. 35 presentations and 7 discussion sessions
- these will be 3 intense days, but more relaxed than last Workshop at CERN!

- **Monday**

- Radiation Damage at the LHC & Discussion
- Defect and Material Characterization & Discussion
- *Collaboration Board (restricted to CB members)*

- **Tuesday**

- Precision Timing Detectors & Discussion
- Device Simulations & Discussion
- Characterization Techniques & Discussion
- *Dinner (all information given in the registration package!)*

- **Wednesday**

- Full Detector Systems (Pixel and Strip Detectors) & Discussion
- CMOS sensors & Discussion

This is a Workshop:
Please participate
actively in the
discussions.

- **Veronique Wedlake**
Secretary and Leader of the organization team
....nothing would work without her!
- **Local organization team (SSD):** Matteo, Ruddy, Yana, Pedro, Esteban, William,....SSD team.
- **Session Chairs and Discussion Convenors:**
Gregor, Gian, Eckhart, Salva, Giulio, *Ivan*,..... *Marco, Joern*
- *Special greetings and thanks to Ioana,*
who could not comeshe became grandma.. 😊
..but prepared the discussion session on defects and will try to connect on vidyo
- **All speakers for their contributions and for keeping the time!**
-for keeping the RD50 budget in shape while being retired in Brazil: **Maurice Glaser**

Enjoy the Workshop!

- **Radiation Effects at LHC Experiments and Impact on Operation and Performance**

- **Common Workshop: (ALICE), ATLAS, CMS, LHCb, RD50**

[<https://indico.cern.ch/event/695271/>]

- **CERN, 11-12 February 2019**

- **4 sessions:**

- Sensor Measurements
- Electronics/Optoelectronics
- Radiation Background Simulation and Monitoring
- Sensor Simulation

- **Last Workshop statistics:**

- 124 participants
- 32 talks, discussion sessions

- **More details in first session of this Workshop**

