

Silvia DALLA TORRE – CV (*updated: August 2021*)

- Born in Trieste, Italy, on April 12, 1955
- Nationality: Italian
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Career:

1981 – 1990: Ricercatore INFN

1990 – 2002: Primo Ricercatore INFN

2002 – present: Dirigente di Ricerca INFN

2000: Scientific Associate, CERN

Membership in Scientific Committees:

- 2000 – 2003 Member of SPS and PS experiments Committee SPSC, <http://committees.web.cern.ch/Committees/spsc/>) at CERN, reviewing fix target experiments at SPS and PS;
- 2003 – 2008 Member of Commissione Scientifica Nazionale I (CSNI, <https://web.infn.it/csn1/>) of INFN, reviewing INFN-supported experiments in particle physics;
- 2005 – 2008 Member of Large Hadron Collider Committee (LHCC) at CERN, LHCC, <http://committees.web.cern.ch/committees/lhcc/>), reviewing the experiments at the LHC;
- 2017-present - European Committee for Future Accelerators (ECFA, <https://ecfa.web.cern.ch/>) Detector Panel (<http://ecfa-dp.desy.de/>), reviewing the detector R&D effort for future projects;
- 2020-2021 – member of the Detector R&D Roadmap Panel, as component of the Coordinator Panel; the Panel assists ECFA in organizing the European Roadmap for Detector R&D, as requested by the approved decisions of the EPPSU process.

Research activity:

1979 – 1983: Nucleon-Nucleon experiment at Saclay-Saturne II

1983 – 1986: PS156 experiment at CERN-LEAR

1985 – 1991: PS201-PS206 experiments at CERN-LEAR

1990 – 1998: NA47 (SMC) experiment at CERN-SPS

1996 – present: NA58 (COMPASS) experiment at CERN-SPS

2008 – present: R&D for MPGD (MicroPattern Gaseous Detector)-based photon detectors

2008 – present: RD51 experiment at CERN

2017 – present: R&D for RICH detectors at the future Electron-Ion Collider in USA

January 2019 – present: EIC_NET, preparatory activity of INFN experimentalists for the experiments at EIC

Main research responsibilities:

1. Project coordination (design, construction, operation, performance) of detectors of increasing size and complexity:

- the antineutron detectors (PS201, PS206) including 400 m² of limited streamer tubes
- MWPCs for the muon beam polarimeter (SMC)
- RICH-1, a large-size gaseous focusing Ring Imaging Cherenkov (RICH) detector (COMPASS)
- the R&D dedicated to novel detectors of single photons based on MPGD-technologies

2. Member of the COMPASS Technical Board (1997-2008).

3. Chairperson of the RD51 Collaboration Board (2008 - 2015); RD51 is a CERN-based technological collaboration dedicated to MicroPattern Gaseous Detectors (MPGD) (<http://rd51-public.web.cern.ch/rd51-public/>);

4. RD51 co-spokesperson (2016 –present).

5. 2004 – present: Spokesperson of 4 work packages within

- the European Community Integrated Infrastructures Initiative HP (FP6);
- the European Community Integrating Activities HP2 (FP7);
- the European Community Integrating Activities HP3 (FP7);
- the European Community Research and Innovation Actions (RIA) AIDA2020 (H2020);

6. 2017-present: project leader of the task “Further development of hybrid MPGDs for single photon detection” within the Consortium eRD6 of the Generic R&D program for the Electron Ion Collider (EIC)

(https://wiki.bnl.gov/conferences/index.php/EIC_R%25D);

7. January 2019-present – PI of the INFN project EIC_NET, to prepare the INFN participation to the future collaborations for the experiments at EIC;

8. 2020-2021: convener of the Detector Working Group of the EIC User Group Yellow Report Initiative to advance the state and detail of the documented physics studies and detector concepts in preparation for the realization of the EIC (<http://www.eicug.org/web/content/yellow-report-initiative>).

9. 2021: member of the Coordination Committee of the ATHENA Collaboration (<https://athena-eic.org/>), preparing a proposal for the Call for Collaboration Proposals for Detectors at the Electron-Ion Collider.

Publications:

- More than 190 articles in international journals with referee
- Sum of the Times Cited: more than 6800
- Sum of Times Cited without self-citations: more than 5800
- H index: 37

Funding ID:

- Project: RICH-1 COMPAS, Role: project coordinator, Period: 1996-2017, Funding source: INFN, Grant to COMPASS-INFN: 6800 k €.
- Project: HP - JRA9 (Ring Imaging Cherenkov Counters for particle Identification), Role: spokesperson, Period: 2004-2008, Funding source: European Community (FP6), Grant: 968 k €.
- Project: HP2 - WP17 (Frontier Photon Detectors for Cherenkov Counters), Role: work package spokesperson, Period: 2009-2011, Funding source: European Community (FP7), Grant: 111 k €.
- Project: HP3 - WP18 (Frontier Photon Detectors), Role: work package spokesperson, Period: 2012-2014, Funding source: European Community (FP7), Grant: 113 k €.
- Project: AIDA2020 - WP13 (Innovative gas detectors), Role: work package spokesperson, Period: 2015-2019, Funding source: European Community (H2020), Grant: 806 k €.
- Project: ERD6 Consortium application to the Generic R&D program for EIC, task: "Further development of hybrid MPGDs for single photon detection synergistic to TPC read-out sensors", Role: task project leader, period: 2017-present, Grant: 228 k \$.
- Project: AIDAInnova – WP7 (Gaseous detectors), Role: work package spokesperson, Period: 2021-2026, Funding source: European Community (H2020), Grant: 1091 k €.

Management of research Institutions:

- 2009 – 2015: Director Sezione INFN di Trieste; this role implies:
 - Member of the INFN Directorate Board; INFN: 4 national laboratories, 20 local sections, 3 national technical centres; 2000 units of INFN personnel, 3000 associated scientists; funding: 240 M euro/Y plus about 50 M euro/y for specific projects;
 - Sezione di Trieste: 270 units of INFN personnel and associated scientists, 3 M euro/y not including personnel costs.

Other activities:

1. On regular basis, referee for the journals NUCLEAR INSTRUMENTS & METHODS A, JOURNAL OF INSTRUMENTATION (JINST) and THE EUROPEAN PHYSICAL JOURNAL PLUS;
2. JINST editor since 1 October 2013;

3. Referee of the experiments OPERA (for SPSC), ATLAS (for INFN), LHCb and TOTEM (for LHCC), referee for the "CMS TECHNICAL DESIGN REPORT FOR THE MUON ENDCAP GEM UPGRADE - CERN-LHCC-2015-012; CMS-TDR-013; 30 September 2015" (for LHCC);
4. Chairperson of the CVI (Comitato di Valutazione Interno, Internal Evaluation Committee) of Centro Fermi (2016-present);
5. On regular basis, member of the Scientific Advisory Committees in conferences dedicated to nuclear and particle instrumentation;
6. Chairperson of the Local Organising Committee of RICH 2007 (Trieste, 2007, <http://rich2007.ts.infn.it/>) and editor of the proceedings;
7. Chairperson of the Local Organising Committee of SNRI 2010 (Trieste, 2010, <http://agenda.infn.it/conferenceDisplay.py?confId=2592>);
8. Chairperson of the Local Organising Committee of MPGD2015 (Trieste, 2015, <http://mpgd2015.ts.infn.it/>) and editor of the proceedings;
9. Co-chairperson of the Local Organising Committee of EICUG2017 (Trieste, 2017, <http://eicug2017.ts.infn.it/>).