

Biographical Sketch

Michael M. Rijssenbeek

Professor of Physics

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(a) Professional Preparation

Undergraduate Institution	University of Amsterdam	Physics and Astronomy	BSc 1972
Graduate Institution	University of Amsterdam	Experimental Particle Physics	PhD 1979
Postdoctoral Institution	CERN, Geneva, Switzerland	Experimental Particle Physics	1979 - 1985

(b) Appointments

2015 – 2017	Scientific Associate	CERN, Switzerland; ATLAS experiment
2007, 2010, 2011	Visiting Scientist	CERN, Geneva, and LAPP, Annecy, France
1994 –	Professor	Stony Brook University, NY; DØ and ATLAS experiments
1989 – 1994	Associate Professor	Stony Brook University, NY; DØ experiment
1985 – 1989	Assistant Professor	Stony Brook University, NY; DØ experiment
1981 – 1985	CERN Staff member	CERN, Switzerland; UA1 experiment
1979 – 1981	CERN Fellow	CERN, Switzerland; UA1 experiment

(c) Products

(i) Five publications related to building detectors

1. "The Upgraded Dzero Detector," the DØ Collaboration (V. M. Abazov *et al.*), Nucl. Instrum. Meth. A 565, 463, 2006.
2. "Construction, Assembly and Tests of the ATLAS Electromagnetic Barrel Calorimeter," the ATLAS Electromagnetic Barrel Liquid Argon Calorimeter Group ([Bernard Aubert et al.](#)). Nucl. Instrum. Meth. A558:388-418, 2006.
3. "The High Voltage Feedthroughs for the ATLAS Liquid Argon Calorimeters," B.Botchev, G.Finocchiaro, J.Hoffman, R.L.McCarthy, M.Rijssenbeek, J.Steffens, A.Talalaevskii, M.Thioye, M.Zdrzil, J.Farrell, S.Kane. JINST 2:T10002, 2007.
4. "The ATLAS Forward Proton upgrade project – Technical Design Report," ATLAS-AFP Collaboration, CERN-LHCC-2015-009; ATLAS-TDR-024; <https://cds.cern.ch/record/2017378/>
5. "Beam tests of an integrated prototype of the ATLAS Forward Proton detector," ATLAS AFP Collaboration (J. Lange et al.), JINST 11 (2015) P09005.

(ii) Five other significant publications

1. "Experimental Observation of Lepton Pairs of Invariant Mass Around 95 GeV/c² at the CERN SPS Collider," the UA1 Collaboration ([G. Arnison et al.](#)). Phys. Lett. B126:398-410,1983. "Experimental Observation of Isolated Large Transverse Energy Electrons with Associated Missing Energy at $\sqrt{s} = 540$ GeV," the UA1 Collaboration ([G. Arnison et al.](#)). Phys. Lett. B122:103-116,1983.
2. "Observation of the Top Quark," the DØ Collaboration ([S. Abachi et al.](#)). Phys. Rev. Lett. 74:2632-2637,1995.
3. Conference Summary XIth International Conference on Elastic and Diffractive Scattering, [Stanley J. Brodsky](#), ([SLAC](#)) and [Michael Rijssenbeek](#); SLAC-PUB-11553, Nov 2005. Invited talk at 11th Int. Conf. on Elastic and Diffractive Scattering: Towards High Energy Frontiers: The 20th

Anniversary of the Blois Workshops, Chateau de Blois, France, 15-20 May 2005.
e-Print: hep-ph/0511178.

4. "Measurement of the W boson mass," the DØ Collaboration ([V. Abazov et al.](#)). Phys. Rev. Lett. 103:141801,2009.
5. "Observation of a new particle in the search for the Standard Model Higgs boson with the ATLAS detector at the LHC," ATLAS Collaboration (G. Aad *et al.*), Phys. Lett. B 716 (2012) 1.

Citation format:

It is impossible to list all authors as the author lists of the collider collaborations are many pages long, and vary by date. The recent ATLAS Author list is uploaded as a Supplementary Document to this proposal.

(d) Synergistic Activities

ATLAS Forward Proton project leader (2015–); responsible for low-jitter clock distribution system for Time-of-Flight detector synchronization. This activity is synergistic with my work on the clock system for the ATLAS High-Granularity Timing Detector (2016–).

Co-convener LHC Technical Working Group on Forward Physics and Diffraction (2013–)

Member/chair of several DØ Editorial Boards (1994–) and ATLAS EBs (2007–)

Chair Local Organizing Committee for XIIth International Conference on Hadron Collider Physics, June 1997, Stony Brook.

Quarknet PI (2000–'05)