

Biographical Sketch – Mayda M. Velasco

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PROFESSIONAL PREPARATION

1984 – 1988 B.S. in Physics, University of Puerto Rico, Rio Piedras
1989 – 1995 Ph.D. in Physics, Northwestern University, Evanston Il.

APPOINTMENTS

2005 – Associate Professor, Dept. of Physics and Astronomy,
Northwestern Univ.
1999 – 2005 Assistant Professor, Dept. of Physics and Astronomy,
Northwestern Univ.
1998 – 1999 CERN Scientific Research Staff
1996 – 1998 CERN Scientific Post-Doctoral Fellow
1989 – 1995 FERMILAB/URA Pre-doctoral Fellow

AWARDS

- 2002-2004: Sloan Research Fellow
- 2002-2003: Woodrow Wilson Fellow – Mellon Foundation
- 1998: CERN Achievement Award

SELECTED PUBLICATIONS

Five most closely related publications

1. H. H. Braun *et al.*, “Non Destructive Single Shot Bunch Length Measurements for the CLIC Test Facility 3,” *In the Proceedings of Particle Accelerator Conference (PAC 07), Albuquerque, New Mexico, 25-29 Jun 2007, pp 4069.*
2. T. Lefevre *et al.*, “Instrumentation for longitudinal beam gymnastics in FEL’s and at the CLIC Test Facility 3,” CERN-AB-2007-025.
3. NA59 Collaboration, A. Apyan *et al.* [NA59 Collaboration], “Results on the coherent interaction of high energy electrons and photons in oriented single crystals,” *Nucl. Instrum. Meth. B* **234**, 128 (2005).
4. D. Asner *et al.*, “Higgs Physics with a $\gamma\gamma$ Collider Based on CLIC1”, *Eur. Phys. J. C* **28** (2003) 27 [hep-ex/0111056](#)
5. Editor, CMS Collaboration, “Performance of CMS Hadron Calorimeter Timing and Synchronization using Cosmic Ray and LHC Beam Data,” accepted by JINST for publication, arXiv:0911.4877 [physics.ins-det].

Five other publications

1. Editor, CMS Collaboration, “Performance of the CMS Hadron Calorimeter with Cosmic Ray Muons and LHC Beam Data,” accepted by JINST for publication, arXiv:0911.4991.
2. S. Heinemeyer, Y. Kahn, M. Schmitt and M. Velasco, “An Experiment to Search for Light Dark Matter in Low-Energy ep Scattering,” arXiv:0705.4056 [hep-ex].
3. J. R. Batley *et al.* [NA48/2 Collaboration], “Measurements of Charged Kaon Semileptonic Decay Branching Fractions $K^{\pm} \rightarrow \pi^0 \mu^+ - \nu$ and $K^{\pm} \rightarrow \pi^0 e^+ - \nu$ and Their Ratio,” Eur. Phys. J. C **50**, 329 (2007) [Erratum-ibid. C **52**, 1021 (2007)] [arXiv:hep-ex/0702015].
4. NA48/1 Collab., “Observation of the rare decay $K_S \rightarrow \pi^0 e^+ e^-$,” Phys. Lett. B **576** (2003) 43 [hep-ex/0309075](#)
5. NA48 Collab., “A New Measurement of Direct CP Violation in two pion decays of the neutral kaon”, Phys. Lett. **B465** (1999) 335 [hep-ex/9909022](#)

SYNERGISTIC ACTIVITIES

- CMS Prompt Feedback Group co-convener (since 2010).
- Member of CLIC advisory board (since 2005).
- Co-spokesperson of NA59 Experiment (since 1998) at CERN.
- Founder of AccMedCC (Accelerador Medico para la Cuenca del Caribe). A non-profit organization to construct a proton/carbon low energy accelerator in Puerto Rico for medical purposes – Cancer therapy.

COLLABORATORS AND OTHER AFFILIATIONS

- **Collaborators:**

I am a member of CMS/LHC, NA48 and NA59 collaborations at CERN, and the CTF3-CLIC machine collaboration at CERN.

- **B. Post-Doctoral advisor:**

Heinrich Wahl (CERN).

- **C. Doctoral advisor:**

Donald Miller and Ralph Segel at Northwestern University.

- **D. Recent Sponsored Postdoctoral Scholars**

T. Lefevre¹, R. Ofierzinsky, A. Anastassov.

- **F. Recent Thesis Advisees**

T. Fonseca², A. Dabrowsky³, S. Won, A. Pozdnyakov, N. Odell

¹Now CERN Staff in beams division.

²Former CERN fellow, now in ATLAS/England.

³Now CERN fellow at CLIC/CTF3.