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CURRICULUM VITAE

ARNULFO ZEPEDA

I. Education

- Undergraduate: 1962-1967 Faculty of Nuclear and Technical Physics of the Technical University of Prague. M.S.
- 1967-1970 Centro de Investigación y de Estudios Avanzados del IPN, México. Ph.D.
- 1970-1972 The Rockefeller University, New York, USA. Ph.D.

Employment

- Professor, Centro de Investigación y de Estudios Avanzados (Cinvestav). September 1972-present.
- Visiting Professor, University of Bern, Switzerland, 1978-1979.
- Visiting Scientist, International School for Advanced Studies, Trieste, Italy 1989.
- Visiting Professor, University of Valencia, Valencia, Spain. 1995-1996.
- Visiting Professor, Universidad de Guanajuato. 2002-2003.
- Visiting Professor, Instituto Nacional de Optica, Electronica y Astrofisica, Tonantzintla, Puebla, Mexico, 2008-2009

III. Research Activities

- Theoretical physics in elementary particle physics: chiral perturbation theory, phenomenology of particle properties, grand unification models, cosmic ray physics.
- Representative of Mexico in the Pierre Auger Collaboraction 1995-present.
- Member of the ALICE Collaboration: tests and installation of cosmic ray detectors. 200-present
- Member of the HAWC Collaboration. 2007-present.

Selected Honors and Awards

- Guggenheim Fellowship (1982-1983).
- Associate Member of the International Centre for Theoretical Physics Italy (1982-1988).

- Member of the Sistema Nacional de Investigadores. Nivel III since 1984-present.
- President of the Division of Particles and Fields of the Mexican Physical Society, 1990-1992.
- President of the Mexican Physical Society, 1992-1994.
- Fellow of the American Physical Society since 1993.
- Senior Assciate Member of the International Centre for Theoretical Physics Italy (1998-2003).
- Mexican Physical Society award for Distinguished Role in the Development of Physics in Mexico, 2001
- X Mexican School of Particles and Fields in honor of Arnulfo Zepeda and A. Garcia, 2002
- Medal of the Division of Particles and Fields of the Mexican Physical Society, 2002
- Medal of Cinvestav for "Leadership in the formation of new researchers"

Selected Research Publications

1. "Evidence for suppression of the flux of cosmic rays above 4×10^{19} eV", Pierre Auger Collaboration [J. Abraham et al.], Physical Review Letters **101** (2008), 061101 (arXiv:0806.4302 [astro-ph]).
2. "Upper Limit on the diffuse flux of UHE tau neutrinos from the Pierre Auger Observatory", Pierre Auger Collaboration [J. Abraham et al.], Physical Review Letters **100** (2008), 211101 (arXiv:0712.1909 [astro-ph]).
3. "Upper Limit on the Cosmic-Ray Photon Flux Above 10^{19} eV Using the Surface Detector of the Pierre Auger Observatory", Pierre Auger Collaboration [J. Abraham et al.], Astroparticle Physics **29** (2008), 243 (arXiv:0712.1147 [astro-ph])
4. "Correlation of the highest-energy cosmic rays with the positions of nearby active galactic nuclei", Pierre Auger Collaboration [J. Abraham et al.], Astroparticle Physics **29** (2008), 188 (arXiv:0712.2843 [astro-ph]).
5. "Correlation of the highest energy cosmic rays with nearby extragalactic objects", Pierre Auger Collaboration [J. Abraham et al.], Science **318**, 939 (9 November 2007) (arXiv:0711.2256v1 [astro-ph]).
6. "Anisotropy studies around the galactic centre at EeV energies with the Auger Observatory", Pierre Auger Collaboration [J. Abraham et al.], Astroparticle Physics **27** (2007), 244. (astro-ph/0607382)
7. "An upper limit to the photon fraction in cosmic rays above 10^{19} eV from the Pierre Auger Observatory", Pierre Auger Collaboration [J. Abraham et al.], Astroparticle Physics **27** (2007), 155. (astro-ph/0606619)
8. "Properties and performance of the prototype instrument for the Pierre Auger Observatory", Pierre Auger Collaboration [J. Abraham et al.], Nuclear Instruments and Methods **A523** (2004), 50.