Research Output of Prof. Teresa Montaruli (Mar. 2017-Mar. 2022)

1 Impact of Publications and bibliometric indicators

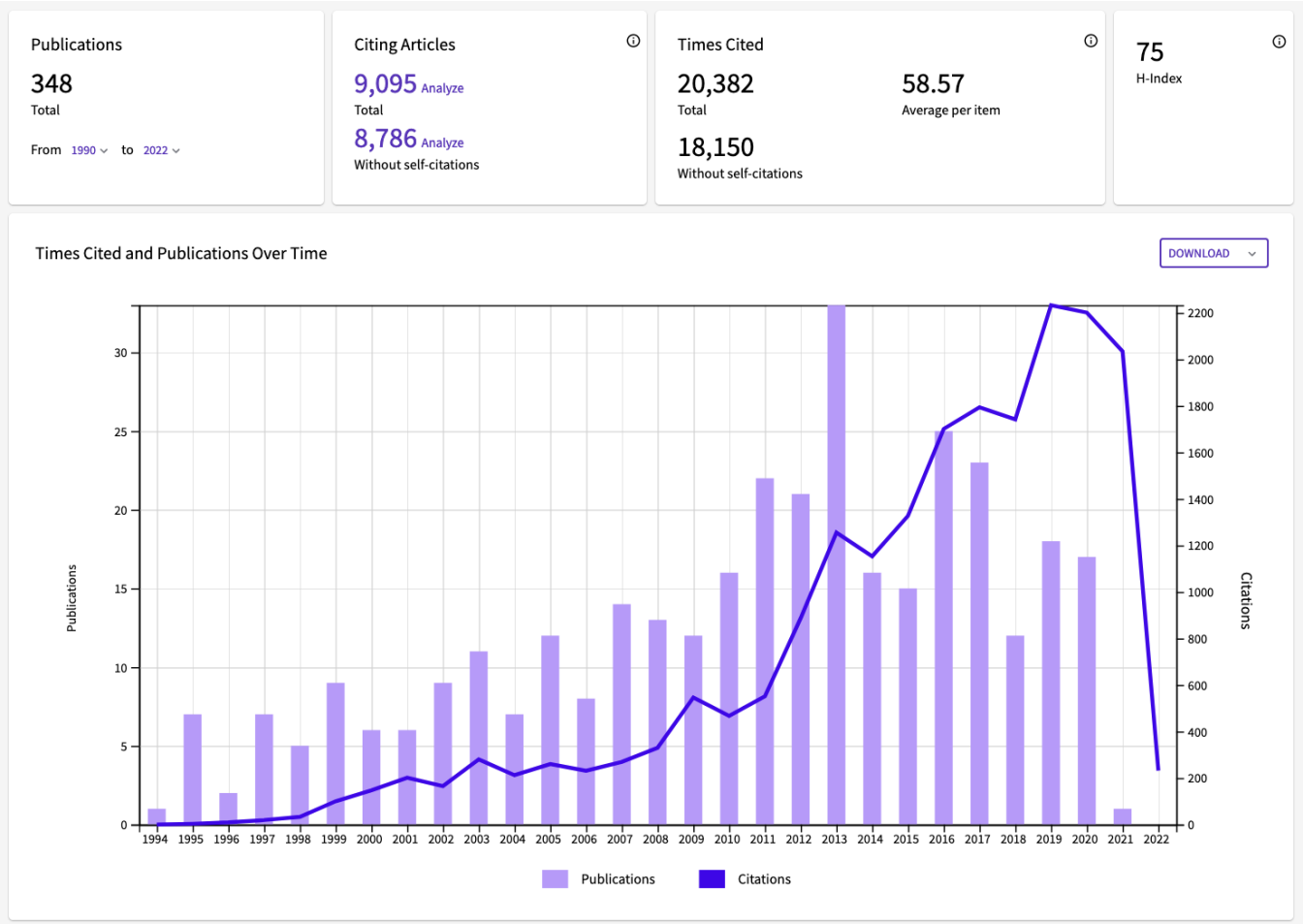

Figure 1: Publications, citations per year and bibliometric indices (**Web of Science**).

2 Publication on international peer reviewed journals

2.1 Physics of Neutrinos and Neutrino Telescopes

2.1.1 IceCube e IceCube-Gen2

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2.2 Gamma-ray astrophysics and related instrumentation

2.2.1 CTA Observatory

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2.2.2 SST-1M SiPM Imaging Air Cherenkov Telescope

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2.2.3 LHAASO Cosmic ray and gamma-ray extensive air shower experiment

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3 Contributions to peer reviewed books

[96] B. Acharya *et al.* [CTA Consortium], *Science with the Cherenkov Telescope array*, World Scientific Book, doi:10.1142/10986 [arXiv:1709.07997 [astro-ph.IM]].

4 Selected Peer reviewed conference papers

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5 Patents and licenses

Polarizing optical separator for stellar intensity interferometry, PCT/CZ2020/000016, patent on an optical device that can be inserted in SST-1M camera to measure stellar intensity interferometry (SII) in the optical. I conceived the idea and the optical laboratory partner JointLab in Olomuc, members of SST-1M, realized the devise. We performed tests in Geneva seeing signs of an excess on top of a background indicating SII capabilities.

6 Outreach Activities: Newsletters and Press

Newsletters:

- Une caméra genevoise filme des rayons cosmiques (Feb. 2022
- IceCube Newsletter Nov. 1, 2021: IceCube conducts a search for multiple flaring episodes from neutrino sources with 10 years of data
- Cern Courier on Foundation by APPEC of the EUCAPT theory centre
- APPEC presentation of the JENAS series of conferences
- Description of the European Particle Physics Strategy Update 2019
- Sulle Tracce dei PeVatrons, Article on the Italian version of Science, Feb. 2022

Public Lectures (2017-2022

- 2017, 2019 : La Nuit de Metiers, Florimont School; Geneva
- TecDay, Lycee Rousseau (2017)
- 2018: Biogem Meeting delle 2 culture, Ariano Irpino 2018
- Club Vela Bari 2019, Rotary Club Bari 2019.

7 General contributions to Science

- 2019-2020: Chair of the General Assembly of APPEC, the Consortium of the main European funding agencies involved in Astroparticle Physics. The main activity was representing Astroparticle in the European Particle Physics Strategy Update.
- Editor of Scientific Reports, Nature, aand referee in many journals (Astrop. Physics, JCAP, Physics Rev. J. Astronomical J., Rev. Modern Phys., New J. Physics, Europ. Phys. J.).
- 2017-2022: Member of CERN Recognized experiment Commission.