National Aeronautics and Space Administration

Antonino Cucchiara

Physics of the Cosmos Early Career Workshop

Antonino Cucchiara,PhD

NASA Program Scientists (Astrophysics)

ASRC Federal – Agile Division Sciences

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Who am I?

- 2004: Graduated M.S. in Physics from **University of Milan (Italy)**
- 2006-2010: **PhD in Astronomy&Astrophysics at PennState**
- 2010-2013: Postdoc fellow at UC Berkeley/UC Santa Cruz
- 2013-2016: **NASA Postdoctoral Fellow** at NASA Goddard Space Flight Center
- 2016 - 2019: **Assistant Professor** in Physics and Astronomy at University of the Virgin Island (HBCU)
- 2019-2022: **Physics and Astronomy Instructor at College of Marin (community college)**
- **2022-present: NASA Program Scientist in Astrophysics**

In other terms…

- **I am immigrant (J1, F1, J1, 212(B), H1B, GC)**
- **English is NOT my first language**
- **I did a PhD, 2 Postdocs (1 NASA Postdoctoral Program Fellowship)**
- **I was a Faculty at an HBCU (U. of the Virgin Islands)**
- **I was a Faculty at a Community College**
- **I now work for NASA**
- **I love my students (past, present and "future")**

My Science

- Study the most energetic explosions in the Universe (**Gamma-ray Bursts, GRB**)
- Hunt for the **first stars** ever formed and **Gravitational Waves counterparts**
- I utilize the best and largest telescopes on Earth (Keck, Gemini)
- I work with data from dedicated satellite, like Swift (**#1 NASA mission after Hubble**)
- I study the chemical enrichment of the Universe and develop new tools to identify and study new **transient phenomena**
- I am excited about Time Domain and Multimessanger Science (TDAMM) era (hint: Rubin, Roman)
- Excited about **Artificial Intelligence beyond ML** in astrophysics research

My Job at NASA

- I managed the FINESST grant program from ALL graduate students in US
- I oversee the NASA Hubble Fellowship Program (Oct. 29 application deadline)
- I oversee the NASA Fermi mission
- I am deputy for TDAMM program (APD priority)
- I mentor students