

Simone Aiola

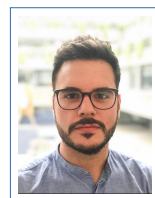
Curriculum Vitae

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PERSONAL INFORMATION

Birth date and place June 4, 1988 - Rome, Italy
Nationality Italian
Languages Italian (native speaker), English (proficiency level)

RESEARCH INTERESTS

Cosmology: phenomenology and data analysis.
Cosmic Microwave Background physics: temperature, polarization, lensing, Sunyaev-Zel'dovich effect.
Cosmic Microwave Background analysis: map-making, simulations, time-ordered data analysis, n-point estimators.

RESEARCH AND APPOINTMENTS

Sept 2016 - present **Postdoctoral Research Associate**, Supervisor: Jo Dunkley.
Physics Department, Princeton University - NJ, USA
Aug 2013 - Aug 2016 **Graduate Student Researcher**, Advisor: Prof. Arthur Kosowsky.
Physics and Astronomy Department, University of Pittsburgh - PA, USA
Aug 2012 - Dec 2013 **Teaching Assistant**, University of Pittsburgh - PA, USA.
Courses: Lab for Physics and Engineers - Lab 0219 (Fall 2012), Intro to Physics 2 - Phys 0111 (Spring 2013 and Summer 2013), Stonehenge to Hubble - Astro 0088 (Fall 2013) - Stars, Galaxies and Cosmos - Astro 0089 (Summer 2014)

For official records of teaching performances please contact Leyla Hirschfeld, graduate program coordinator (lmh@pitt.edu).

EDUCATION

Ph.D., Physics **University of Pittsburgh - PA, USA, 2012 - 2016.**
Thesis: *New Probes of CMB Large-Scale Anomalies*
Advisor: Prof. Arthur Kosowsky
M.Sc., Physics **University of Pittsburgh, PA - USA, 2012 - 2013 (Awarded in 2014).**
M.Sc., Astrophysics **'La Sapienza' University of Rome, IT, 2010 - 2012.**
Remarks: graduated *cum laude*
B.Sc., Physics & Astrophysics **'La Sapienza' University of Rome, IT, 2007 - 2010.**

AWARDS AND FELLOWSHIPS

2014 and 2015 **Zaccheus Daniel Predoctoral Fellowship.**
Department of Physics and Astronomy - University of Pittsburgh
2015 **Andrew Mellon Predoctoral Fellowship.**
The Dietrich School of Art and Sciences - University of Pittsburgh
2014 **University of Pittsburgh School of Arts and Sciences Fellowship.**
The Dietrich School of Art and Sciences - University of Pittsburgh
2014 **Nomination for Outstanding Teaching Assistant Awards.**
American Association of Physics Teachers

- 2014 **Myron P. Garfunkel Excellence in Graduate Student Teaching Award.**
Department of Physics and Astronomy - University of Pittsburgh

MENTORSHIP

- Sept 2014 - Sept 2015 **Art and Sciences Teaching Assistant Mentor.**
University of Pittsburgh - PA, USA
- May 2014 - Aug 2016 **Undergraduate Mentorship**, Co-advising undergraduate student Ellis Herman (University of Richmond).
Project: Probing the lack of large-scale CMB correlation with polarization and lensing measurements.
- May 2013 - Aug 2016 **Undergraduate Mentorship**, Co-advising undergraduate student Bingjie Wang (University of Pittsburgh).
Project: Large-scale anomalies in the CMB temperature sky.

COLLABORATIONS

- May 2016 - Present **Simons Observatory (SO)**, *Main contributions: TOD-to-map working group, pipeline design working group.*
- Sept 2014 - Present **Atacama Cosmology Telescope (ACT)**, *Main contributions: Remote Control Observer, lead map-maker, kSZ working group, cosmology from 2-point working group.*
- Sept 2010 - Aug 2012 **Large-Scale Polarization Explorer (LSPE)**, *Main contributions: optimization of the scanning strategy for B-mode search.*

COMPUTER SKILLS AND COMPETENCES

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|--------------------|--|
| Languages | Fortran, C/C++, IDL, Matlab (Octave), Python |
| Cosmological tools | CAMB, CLASS, polSPICE, HEALPix |
| Supercomputing | MPI, OpenMP, clusters used: SCINET (Canada) and Hippo (South Africa) |

TALKS AND POSTER PRESENTATIONS

For a detailed list of talks and posters with PDFs, visit my website. Below a list of talks from 2016.

- Nov 2017 **‘Cosmology with ACTPol and AdvACT’**, invited talk.
Cosmology Seminar - Case Western Reserve University, USA
- July 2017 **‘Maximum-likelihood map-making for ACT’**, contributed talk.
Advances in Theoretical Cosmology in Light of Data - Nordita, Stockholm
- Feb 2017 **‘Cosmology with ACT’**, invited talk.
UKZN, SKA, and AIMS - South Africa
- Feb 2017 **‘Maximum-likelihood map-making for ACT’**, contributed talk.
Cosmology on Safari - South Africa
- Jan 2017 **‘From Time-Ordered Data to Cosmology with the Atacama Cosmology Telescope’**, invited talk.
Gravity Group Lunch - Princeton University, USA
- Mar 2016 **‘New Probes of Large-scale CMB Anomalies’**, invited talk.
Cosmology Seminar - Case Western Reserve University, USA

REFERENCES

Prof. Arthur Kosowsky, *Ph.D. Advisor*, email: kosowsky@pitt.edu.
Prof. Jo Dunkley, *Postdoc Supervisor*, email: jdunkley@princeton.edu.
Prof. Lyman Page, email: page@princeton.edu.

Additional References

Prof. Glenn Starkman, email: glenn.starkman@case.edu.
Prof. Jonathan Sievers, email: jonathan.sievers@gmail.com.