Abdalrahman Abohalima

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personal website

EDUCATION

M.Sc. Astrophysics, Lund University, Sweden — June 2017
Supervisor: Dr. Louise Howes.
Thesis: Neutron - capture elements in the early universe.

B.Sc. Physics, Alexandria University, Egypt — June 2013
Supervisor: Dr. Magdy Alabshehy.
Thesis: The constituents of the interstellar medium.

HONORS & AWARDS

Lund University global scholarship; masters degree tuition fees. — 2015 - 2017
Scholarship awarded on academic merit basis.

Physics honors program, Alexandria University — Jan 2012 - Jun 2013
Selection based on academic achievements, only 2 students joined the program my year.

WORK EXPERIENCE

Database developer, MIT physics department, USA — Jun - Aug 2016
Curated a database for metal-poor stars with a Python based web application. A project funded by the Joint Institute for Nuclear Astrophysics (JINA). In collaboration with Prof. Anna Frebel from MIT. Web application at jinabase.pythonanywhere.com

Python developer, MIT physics department, USA — Jun - Aug 2017
Developing a python interface with an SQL database for Prof. Anna Frebel's research group.

TEACHING

Teaching Assistant, Alexandria University, Egypt — Sep 2013 - Jan 2014
Teaching and grading laboratory physics for first year science major students.

Physics instructor, — Sep 2013 - Jan 2014
Arab Academy for Science, Technology & Marine Transport, Egypt
Teaching laboratory physics for first year engineering major students.

PUBLICATIONS

[1] A. Abohalima and A. Frebel. JINAbase: A database for chemical abundances of metal-poor stars. *ArXiv e-prints*, November 2017, arXiv1711.04410.

PRESENTATIONS

Masters talk: "Neutron capture elements and metal-poor stars", — Sep 2016
Part of Lund's masters program.

Course talk: "Evolution of the martian atmosphere", — Oct 2016
Planetary sciences course at Lund Observatory.

Local talk: "Masters project first results", — Nov 2016
Stellar population group at Lund Observatory.

Invited talk: "Neutron capture elements in the early Universe", — Feb 2017
Galactic archeology group at ARI, Heidelberg.

Masters final presentation: "Neutron capture elements in the early Universe". — May 2017

SKILLS

Python, Matlab, Linux, SQL, Pandas, Excel, and Bokeh.
Flask, HTML, CSS, Javascript, Web application design, and LaTeX.

RESEARCH INTERESTS

Stellar archeology, metal - poor stars, the early Universe, the first stars, stellar nucleosynthesis, galactic chemical evolution, heavy elements neucleosynthesis, accurate/precise stellar abundances.