

Reem A. B. Alraddadi -- Résumé

Address	Department of Physics Faculty of Sciences - King Saud University, P.O. Box 2455 Riyadh 11451 Saudi Arabia	Work Phone	0011- 8058148
Nationality	Saudi	Email	ralraddadi@ksu.edu.sa
LinkedIn page	Reem's LinkedIn		

Education

2011-2016 Doctor of Philosophy (PhD) in an intense laser-plasma physics,
York Plasma Institute, University of York, United kingdom

2010-2011 General and academic English courses, University of Leeds, United kingdom

2004-2008 Master degree in theoretical Plasma Physics (Distinguish),
Riyadh university of women (Princess Nora bint Abdul Rahman University), Saudi Arabia

2000-2004 Bachelors degree in Physics (Distinguish),
Riyadh university of women (Princess Nora bint Abdul Rahman University), Saudi Arabia

RESEARCH INTERESTS

Computational modelling of laser-plasma interactions
The transport of relativistic particles in high energy plasmas (Fast electron transport)
Plasma physics occurring in inertial confinement fusion(Fast ignition)
How high power lasers interact with materials (laser intensity $1e22\text{ W/cm}^2$ and above)
High energy density physics
Plasma spectroscopy

Employment History

Feb 2016-present Visiting researcher, York Plasma Institute, University of York, United Kingdom.

May 2016-present Assistant Professor, Department of Physics, Faculty of Sciences - King Saud University

2012 Demonstrator, Department of Physics, University of York, United Kingdom

2009-2015 Teaching Assistant of Physics (Scientific Demonstrator),
Department of Physics, Faculty of Sciences - King Saud University

2004-2008 Teaching Assistant of Physics (part-time Demonstrator),
Department of Physics, Faculty of Sciences - King Saud University

Skills

■ Programming Languages

PYTHON
MATLAB
FORTRAN
IDL (basic)

■ Scientific computer codes

1D hydrodynamic simulation codes
Collisional-radiative spectral analysis codew
3D PIC hybrid simulation code
VisIt software

■ **Operating system**

Linux
OS X
Windows

■ **Other Qualifications**

LaTeX
Microsoft Office

■ **Languages**

Arabic: Mother tongue
English : fluent

Sessions

- 10/2011** Introduction to learning and teaching for Physics and Computer science,
University of York, United kingdom
- 11/2012** High Power Laser (HPL) training weeks course,
Central Laser facility, Rutherford Appleton Laboratory, Oxfordshire, Didcot, United kingdom.
- 02/2013** How to produce, present, and defend a physics research poster,
University of York, United kingdom
- 05/2013** Introduction to Linux,
University of York, United kingdom
- 2012/2013** Doctoral Training Network in laser-plasma physics,
Central Laser facility, Rutherford Appleton Laboratory, Oxfordshire, Didcot, United kingdom.
- 04/2014** Introduction to High Performance Computing (HPC),
University of York, United kingdom
- 01/2017** Micro-teaching Observation course,
King Saud university, Saudi Arabia
- 02/2017** Research Connect workshop,
British Council, Saudi Arabia
- 02/2017** Plagiarism,
King Saud university, Saudi Arabia

Conferences

- 14/12/2014** Poster given at Christmas High Power Laser Science Community Meeting ,
Guildhall, Abingdon, Oxfordshire, United kingdom
- 14/09/2014** Oral presentation given at 13th international workshop on fast ignition of fusion targets,
Queen College, University of Oxford, United kingdom
- 23/05/2014** Oral presentation given at York Plasma Institute,
University of York, United kingdom
- 13/01/2014** Oral presentation given at Atomic Physics in High Energy Density Plasmas meeting,
Imperial College, London, United kingdom.

- 25/06/2013** Oral presentation given at 3rd FuseNet "The European Fusion Education Network" Conference, University of York, United kingdom
- 28/04/2013** Attend The 40th IOP Annual Spring Conference on Plasma Physics, University of York, United kingdom
- 22/02/2013** Poster given at Physics Postgraduate Poster Conference, University of York, United kingdom
- 17/12/2012** Oral presentation given at Christmas High Power Laser Science Community Meeting , Guildhall, Abingdon, Oxfordshire, United kingdom

Papers

- (1) Eleanor Tubman, Robbie Scott, Hugo Doyle, Jena Meinecke, HAMAD AHMED, Reem B. Alraddadi, Riccardo Bolis, Joseph Cross, Robert Crowston, Domenico Doria, Donald Lamb, Brian Reville, Alex Robinson, Petros Tzeferacos, Marco Borghesi, Gianluca Gregori, and Nigel Woolsey, "Time evolution and asymmetry of a laser produced blast wave", Phys. Plasmas, Accepted 27th Sep (2017).
- (2) R. A. B. Alraddadi, A. P. L. Robinson, N. C. Woolsey, J. Pasley, "The effect of grading the atomic number at resistive guide element interface on magnetic collimation", Phys. Plasmas 23, 072706 (2016).
- (3) Eleanor R Tubman, Robert Crowston, Reem Alraddadi, Hugo W Doyle, Jena Meinecke, Joseph E Cross, Riccardo Bolis, Donald Lamb, Petros Tzeferacos, Domenico Doria, Brian Reville, Hamad Ahmed, Marco Borghesi, Gianluca Gregori, Nigel C Woolsey, "Nanosecond Imaging of Shock-and Jet-Like Features", Plasma Science, IEEE Transactions on 42 (10), 2496-2497.

Articles

- (1) R. A. B. Alraddadi, A. P. L. Robinson, N. C. Woolsey, J. Pasley, " Improving the fast electron collimation via grading the atomic number at resistive guide element transition region", SCARF annual report, 2015-2016.
- (2) R. A. B. Alraddadi, A. P. L. Robinson, N. C. Woolsey, J. Pasley, " Heating in wire-like target using laser-generated fast electrons and the theory of angular rarefaction", CLF annual report, 2013-2014.