

Rutherford's Gold Foil Experiment by Kara Page

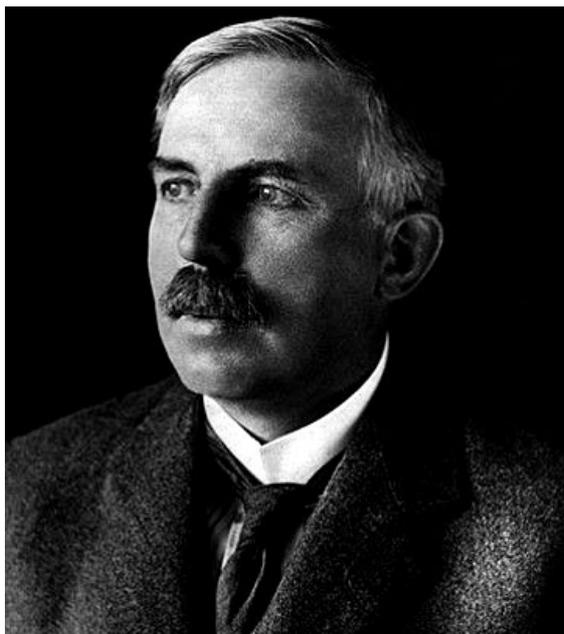
Conferences in 2011

The group would particularly like to attract your attention to two major forthcoming conferences that will take place in the UK this year.

This year, the IOP Nuclear Physics group will join with 4 other IOP subject groups, High Energy Particle Physics, Gravitational Physics, Astroparticle Physics and Particle Accelerators and Beams Groups, for its annual conference. The five groups will meet together for four days at the University of Glasgow from the 4th of April 2011. This conference will be one of the largest, most exciting and broadest ranged NPP divisional conference ever held. Further information can be found at:

<http://www.iop.org/events/scientific/conferences/index.html> .

From the 8th to 12th of August 2011, an international conference celebrating the 100th anniversary of Rutherford's publication on the atomic nucleus discovery will take place at the University of Manchester. For more information, please visit the web site: <http://rutherford.iop.org/>.



The Geiger–Marsden experiment (also called the Gold foil) was an experiment to probe the structure of the atom performed by Hans Geiger and Ernest Marsden in 1909, under the direction of Ernest Rutherford at the Physical Laboratories of the University of Manchester.

The unexpected results of the experiment demonstrated for the first time the existence of the atomic nucleus, leading to the downfall of the plum pudding model of the atom, and the development of the Rutherford (or planetary) model.

Supported by the IoP, this exceptional event will see no less than 30 invited speakers coming from 25 different institutes of 11 different countries from all over the world, to present the latest on current topics in modern nuclear physics, including nuclear structure and astrophysics, hadron structure and spectroscopy, weak interactions and relativistic heavy-ion collisions.

Outreach

Rutherford DVD

Dr David Jenkins, from the University of York, has an STFC small award to produce 5000 copies of a DVD celebrating Rutherford year. This will be sent, among others, to 2000 IOP-affiliated schools. The purpose of the DVD is to

raise awareness of the Rutherford anniversary and present resources of use to teachers and other educators. This will include audio/video of various outreach presentations. We would like to add any other material which might be useful. This might be talks to the general public which you have given, or other resources for teachers. If you have any suggestions on content, please send them to David Jenkins - david.jenkins@york.ac.uk

Half-day meetings

The group continues to support the organisation of IOP half-day meetings. Three of these meetings were organised in 2010:

- Use of GEANT4 in Nuclear Physics, Jan 2010, York.
- Nuclear Astrophysics in Novae and X-Ray Bursts, Feb. 2010, York.
- Recent Results in Nuclear Physics, Jun. 2010, Paisley.

Earlier this year a half day meeting on application of R-Matrix theory – nuclear physics and beyond, also took place in York. ***The group would like to invite all institutes willing to organise further meetings this year to contact the chair or honorary secretary.***

Conference bursary scheme

Each year, the Group provide financial support to Nuclear Physics student members for attending international conferences or schools, through the Research Student Conference Fund (RSCF). Three applications were received in 2010 and all were successful. Details on how to apply and application forms may be downloaded from the Institute's website. ***Student IOP members may apply to receive up to £250 during the course of their PhD.***

Group prizes

The committee is delighted to announce that the Nuclear Physics group prize 2010 has been awarded to Dr Edward Simpson from the University of Surrey. The group prize is awarded annually to promising early-career scientists for outstanding contributions to the field of Nuclear Physics. A total of 4 nominations were received. The prize will be presented to Dr E. Simpson during the IOP Nuclear and Particle Physics Division Conference, in Glasgow.

Changes in the committee

A new member

In May 2010, John Priestland, acting chair of the new Nuclear Industry Group, joined the committee. He is acting as liaison with that group, and also as an industrial contact.

Election of new Committee Members

We would like to thank Dave Ireland and Dave Jenkins for their contributions over the last 3 years as chair and secretary of the group committee. The election for a new chair and secretary will take place at the Annual General Meeting during the NPP divisional conference in Glasgow. In addition, several ordinary members of the NPG are due to end their service on the committee. Nomination forms for all vacant posts will be sent out with the notice for the AGM. ***Please consider nominating yourself or others for the important task of representing the Nuclear Physics community in the IOP***

This newsletter is also available on the web and in larger print sizes

The contents of this newsletter do not necessarily represent the views or policies of the Institute of Physics, except where explicitly stated.

The Institute of Physics, 76 Portland Place, W1B 1NT, UK.

Tel: 020 7470 4800

Fax: 020 7470 4848