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INDIANA UNIVERSITY

Junior Faculty Position in Theoretical Physics

The Department of Physics at Indiana University invites applications for a tenure-track Assistant Professor position in Theoretical High Energy and/or Theoretical Nuclear Physics for an anticipated appointment beginning Fall 2008. We are seeking highly qualified candidates who will complement or expand upon current research activities of the High Energy Theory and/or Nuclear Theory group focused particularly on any aspect of sub-nuclear physics, astro-particle physics or nuclear astrophysics. The current research directions include nuclear and astro-particle physics, beyond standard model phenomenology, tests of Lorentz and CPT symmetry, lattice QCD and hadron phenomenology and nuclear structure.

Applicants should have a Ph.D., an outstanding research record and commitment to excellence in teaching at both undergraduate and graduate level. The Indiana University Physics Department currently has 37 faculty carrying out research in Accelerator Physics, Experimental Nuclear and High Energy Physics, Condensed Matter and Material Science, and Biophysics.

Applications should be submitted via email to physsrch@indiana.edu or by mail to:

**Theoretical Physics Search, Physics Department,
Indiana University, Bloomington, IN 47405**

Interested applicants should submit a letter of application and curriculum vitae with list of publications, a description of research interests, and arrange for submission of a minimum of three letters of reference. Review of applications will begin on January 15, 2008 and will continue until the position is filled. Further information about the IU physics department can be found at <http://www.physics.indiana.edu>.

Indiana University is an Affirmative Action, Equal Opportunity Employer committed to excellence through diversity. The University actively encourages applications of women, minorities, and persons with disabilities.

LEDERMAN FELLOWSHIP

EXPERIMENTAL PARTICLE OR ACCELERATOR PHYSICS

The Fermi National Accelerator Laboratory (Fermilab) has an opening for a postdoctoral Lederman Fellow in experimental particle physics or accelerator physics. We are looking for candidates who have demonstrated outstanding ability in research. In recognition of Leon Lederman's commitment to the teaching of physics at all levels, the successful candidate will also be expected to participate, for a fraction of his/her time, in physics outreach. The Lederman Fellow will have a choice of opportunity within the broad program of experimental research at Fermilab, which includes experiments at the energy frontier, neutrino physics, particle astrophysics and accelerators. See <http://www.fnal.gov/> for more information.

Candidates should have obtained a Ph.D. in experimental particle or accelerator physics after November 15, 2006. The appointment is normally for three years with a possible extension.

To apply write to: Dr. Vaia Papadimitriou (Chair of Lederman Fellowship Committee), Fermi National Accelerator Laboratory, MS 306, P.O. Box 500, Batavia, IL 60510-0500 or vaia@fnal.gov. Applicants should send a cover letter detailing prior research and noting any experience or interest in teaching/outreach, curriculum vitae, publication list and the names of at least four references. Applications will be accepted through January 4, 2008.



Fermilab is an Equal Opportunity Employer - M/F/D/V



HadronPhysics I3 Study of Strongly Interacting Matter

European Commission

Transnational Access to Research Infrastructures

The Integrated Initiative "HadronPhysics I3", financed by the European Commission and coordinated by the Istituto Nazionale di Fisica Nucleare, Laboratori Nazionali di Frascati, Italy, combines in a single contract several activities, Networking, Research Projects and Transnational Access. The Transnational Access activity involves 9 infrastructures (INFN-LNF, DESY-HERMES, FZJ-COSY, FZJ-NIC/ZAM, GSI-SIS, U. MAINZ-MAMI, ZIB, LU-MAXLAB, UU-TSL). Its objective is to offer the opportunity for European research teams, performing or planning a research project at these infrastructures, to

APPLY FOR EC FUNDED ACCESS

including the support for travel and subsistence expenses.

The only eligible teams (made of one or more researchers) are those that conduct their research activity in the EU Member States or in the Associated States.

Information about the modalities of application and the **Calls for Proposals** can be obtained by visiting the HadronPhysics I3 web site <http://hadronphysics.infn.it/>

Scientist Positions within the Advanced Study Group of the Max Planck Society at the Centre of Free Electron Laser Science in Hamburg



The "Advanced Study Group" (ASG) funded by the Max Planck Society (MPG) is part of the "Centre for Free Electron Laser Science" (CFEL) presently being established in Hamburg (http://hasylab.desy.de/science/cfel/index_eng.html). The ASG shall support research activities of groups within the Max-Planck-Society at 4th generation Free Electron Laser (FEL) light sources such as FLASH in Hamburg and LCLS in Stanford.

Applications are invited for **two scientist positions**, located at DESY, to establish in Hamburg a fast-laser and pulsed x-ray laboratory for the preparation of MPG-FEL experiments, to operate and maintain single-photon counting x-ray pixel CCDs developed from the Max-Planck semiconductor laboratory. They are supported by two further scientists, two technicians and students. Specifically, we are looking for researchers experienced in

- (1) **time-resolved diffraction methods.** The successful candidate should have a strong background in physics, chemistry or biophysics or crystallography. Experience in diffraction experiments at FEL, SPPS or synchrotrons sources, or, alternatively, in ultra-fast x-ray science based on table top pulsed x-ray sources, are of advantage
- (2) **x-ray spectroscopy and coherent scattering.** The successful candidate should have a strong background in x-ray spectroscopy, operation of monochromators at FELs or synchrotrons and x-ray detection. Experience with CCD devices with FEL, SPPS or ESRF experiments and in coherent scattering are of advantage. This position is understood as a link between instrument developers and beamline scientists.

We expect the successful candidates to interact collaboratively among a variety of disciplines. Apart from supporting experiments actively pursued within the ASG, independent research is encouraged.

Remunerations are according to TVöD (German civil service scale). The initial appointment will be for three years, with the possibility for a two-year extension. It is intended to have a long term perspective, given excellent performance and the continuation of funding by MPG within the CFEL.

As an equal opportunity employer, the Max Planck Society seeks to increase the percentage of female employees in areas where they are under-represented. Qualified women are therefore strongly encouraged to apply. The Max Planck Society is also committed to employing more individuals with disabilities. We therefore actively encourage individuals with disabilities to apply.

To apply, please send your CV including a brief description of your research / scientific interests, a list of publications, a copy of the most relevant publication, and names and email addresses of two referees either as email attachments or hard copy to:

Prof. Dr. Joachim Ullrich
Max-Planck-Institut für Kernphysik
Saupfercheckweg 1
D-69117 Heidelberg
joachim.ullrich@mpi-hd.mpg.de

Informal enquiries may be sent to Dr. Simone Techert (Simone.Techert@mpi-bpc.mpg.de) and Dr. Lothar Strüder (lts@hll.mpg.de) for position 1 and 2, respectively.

Deadline for applications is Dec 1st 2007, desired starting date as soon as possible.

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Entrepreneurship for Physicists and Engineers from Developing Countries

Workshop Programme, 17 March – 21 March 2008

Abdus Salam International Centre for Theoretical Physics, Trieste, Italy

This one week residential workshop on '**Entrepreneurship for Physicists and Engineers from Developing Countries**' is designed for physicists in developing countries who would like to learn entrepreneurial/commercialisation skills. The development of entrepreneurial skills and attitudes now form a vital part of the education programme. The aim of the workshop is to foster the culture of enterprise that will help physicists in their careers help them make positive contribution to the economy of their countries.

Vital aspects of the workshop include: how to spot opportunities, identification of market need, how to protect intellectual property, need for confidentiality, patenting, how to bring developments to market, licensing, raising capital, funding, venture capitalist route, legal issues, incubation, etc. This workshop will also provide delegates an opportunity to engage with successful role models who are expert in their field and to discuss real life issues, barriers and challenges. A number of case studies will be discussed providing an excellent opportunity to understand the issues involved and to identify the best practice from the example. Various transferable skills like negotiation, interpersonal and communication can be learned from the group activities and networking.

The workshop is organized by the International Union of Pure and Applied Physics, the Abdus Salam International Centre for Theoretical Physics, the Institute of Physics and the European Physical Society.

Grant Application & Registration

Grant Application Deadline: 15 December 2007

Grants are available to delegates from developing countries to cover the subsistence cost and travel expenses.

The application form may be downloaded from

<http://www.ictp.it/~smr1996>

and should be sent to Ms. Suzie Radosic (see below for full details) and should include:

- a) name, address, and other contact details (email, telephone, fax);
- b) a brief summary of qualifications and career to date;
- c) a short statement (up to 250 words) describing why the workshop will be useful to you;
- d) a letter of support from a referee;
- e) amount required to cover travel expenses.

Applicable only to candidates who are nationals of, and working in, a developing country, and who are not more than 45 years old.

DUE TO VERY LIMITED FUNDS, PRIORITY WILL BE GIVEN TO CANDIDATES COVERING 50% OF THEIR OWN TRAVEL EXPENSES.

Please return your application by mail, fax or email latest by **15 December 2007**.

NOTE: Successful applicants will be notified within one month of the closing date. Due to the number of applications received we are unable to notify unsuccessful candidates. If you have not heard from us within one month of the closing date, you may assume that your application has been unsuccessful. All the selected delegates will be informed by end of January 2008.

Applications should be submitted to:

Entrepreneurship for Physicists and Engineers from Developing Countries (smr1996)
(c/o Ms. Suzie Radosic), The Abdus Salam International Centre for Theoretical Physics,
Strada Costiera 11, 34014 Trieste, Italy, Tel: 39 040 2240226, Fax: +39 040 22407226,
Email: smr1996@ictp.it Web page: <http://www.ictp.it/~smr1996>



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The Science and Technology Facilities Council will bring strategic leadership and an integrated approach to UK investments in large national and international research facilities, whilst continuing to deliver world-class science, technology and people for the UK. The Council is involved in some of the world's most exciting research projects – like the Diamond Light Source Synchrotron and the Large Hadron Collider – and will develop new areas of science and technology – with your help.

GRIDPP Storage Support (FBU141)

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A post is available at the Science & Technology Facilities Council to support the grid access to mass storage systems in GridPP, the UK Grid for particle physics.

You will be joining the GridPP storage support team to work with storage experts within the UK and in the rest of the global Large Hadron Collider computing grid. You must have Unix or Linux system administration experience, as well as programming experience in script and C/C++, and experience with software testing, packaging, and deployment.

As you will be working with scientific communities, you should have a higher degree or equivalent in a natural science. Since many standards are emerging, experience with research and publications is also desirable.

For further information and how to apply: please visit www.scitech.ac.uk, telephone 01235 446677 or e-mail recruitment-FBU@rl.ac.uk quoting reference number FBU141. For further information about the post please refer to the STFC vacancies web site, or contact Dr J Jensen on j.jensen@rl.ac.uk

An excellent index linked pension scheme and generous leave allowance are also offered.

Closing date for applications is 9 November 2007.

Interviews to be held end of November 2007.

NO AGENCIES

www.scitech.ac.uk

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CERN Courier, IOP Publishing, Dirac House, Temple Back, Bristol BS1 6BE, UK

cerncourier.com/jobs

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Faculty Positions in Experimental High Energy Physics and High Energy Theory

The Department of Physics and Astronomy at Rutgers (New Brunswick, NJ) invites applications for two tenure-track/tenured faculty positions, in experimental and theoretical particle physics. All ranks (assistant/associate/full professor) will be considered for the experimental position. The theoretical position will be at the assistant professor level.

The department has a strong program in High Energy Physics. Both the theory and experimental groups are involved in hadron collider physics, as well as particle astrophysics. The theory and experimental groups have a tradition of working closely.

The experimental group participates in the CDF and CMS experiments at Fermilab and CERN, respectively, and the HiRes experiment in astroparticle physics. The particle theory effort involves both the high energy theory group and the New High Energy Theory Center. Both positions aim to enhance Rutgers involvement in LHC physics.

Applicants should be committed to excellence in undergraduate and graduate education. Please send a curriculum vitae, a signed cover letter that includes a statement of accomplishments and interests, and the names of at least three but no more than five referees to the address below by December 15, 2007. Do not ask the referees to send letters at this time; any such requests will be made directly by Rutgers.

Prof. Torgny Gustafsson, Chair
Department of Physics and Astronomy
Rutgers University
136 Frelinghuysen Road
Piscataway, NJ 08854-8019, USA

In addition to the hard copy, applicants are requested to transmit an electronic version (PDF file) of the submitted application. Experimental Particle Physics: email to Amitabh Lath, lath@physics.rutgers.edu Particle Theory: email to Matt Strassler, strassler@physics.rutgers.edu

Rutgers University is the State University of New Jersey. Its New Brunswick campus is located in central New Jersey which is known for its cosmopolitan culture and diversity. The New Brunswick area offers excellent access to New York City, the New York metro area and the Boston - New York - Philadelphia - Baltimore - Washington D.C. metro corridor.

Rutgers University is an equal opportunity/affirmative action employer.

POSTDOCTORAL POSITIONS IN EXPERIMENTAL PHYSICS WITH GLAST AT SLAC

SLAC invites applications for Postdoctoral Researchers to work with the GLAST Large Area Telescope (LAT) team. SLAC hosts the LAT Instrument Science Operations Center (ISOC) and is responsible for configuration, calibration, and initial data processing. Research at SLAC focuses on search for dark matter, cosmic particle interaction and acceleration mechanisms, and relativistic outflows. For details see <http://glast.stanford.edu> and <http://glast-isoc.slac.stanford.edu/>.

Appointees will conduct research with GLAST and related multi-wavelength data, and play significant roles in instrument operation and performance analysis in collaboration with ISOC. Ph.D. in Physics or Astrophysics is required. The tenure is two years, with the potential renewals subject to satisfactory performance. Applicants should send a letter stating research interests, a CV, and three reference letters to raadmin@slac.stanford.edu by emails (preferred) or by postal mail to **SLAC, MS 60, 2575 Sand Hill Road, Menlo Park, CA 94025** no later than December 1, 2007.

SLAC is an equal opportunity employer committed to increasing the diversity of its staff and welcomes applications from women and minority groups.



INDIANA UNIVERSITY

Director of the Indiana University Cyclotron Facility

Applications are invited for the directorship of the Indiana University Cyclotron Facility (IUCF). The IUCF has a diverse mission of multi-disciplinary research, service and education and also provides technical support and beam to the Midwest Proton Radiotherapy Institute (MPRI), one of only five such facilities in the United States.

We seek a scientist or science manager with a distinguished record of accomplishment who will provide the vision, leadership and entrepreneurial spirit needed to sustain and further IUCF's outstanding scientific research efforts, and will support the partnership with MPRI in the development of new radiotherapy treatments, technologies and applications.

IUCF conducts research in a variety of areas, including accelerator physics, condensed matter physics, medical physics, nuclear physics, nuclear chemistry, radiation effects on materials and radiation biology. The facility collaborates closely with the nationally ranked nuclear physics program at Indiana University Bloomington, which is currently developing detectors for use at national facilities to study high-energy spin physics, fundamental neutron physics, and neutrino oscillations. The facility is also developing novel neutron scattering instrumentation for the Low-Energy Neutron Source at IUCF, which recently began operation.

The director will serve a five-year term starting in the summer of 2008 and will receive a tenured professorship in the College of Arts and Sciences. Salary will be commensurate with experience and qualifications. Nominations are welcome. Applications with a complete resume, including the names of four references, should be sent as soon as possible to:

Professor Alex Dzierba
Chairperson, Search and Screen Committee
Office of the Vice Provost for Research
Indiana University
Franklin Hall 116-Y
Bloomington, IN 47405-1223

Or email applications to: DLTAYLOR@indiana.edu

Indiana University is an Affirmative Action/Equal Opportunity Employer, and encourages applications from women and minority candidates.

The University of Virginia

Tenure-Track Faculty Position in Experimental High Energy Physics

The Department of Physics of the University of Virginia invites applications for an Assistant Professor tenure-track faculty position in experimental high energy physics starting in Fall semester 2008. Applicants must hold a doctorate in physics and be committed to teaching at both the graduate and undergraduate levels. Prior experience in experimental high energy physics is required. The University of Virginia experimental group has strong participation in the CMS experiment at the Large Hadron Collider and in the NOVA neutrino experiment at Fermilab. Candidates with interests in those experiments will receive special attention. Review of applications will begin on October 2, 2007; full consideration will be extended until December 31, 2007; however, the position remains open to applications until filled.

Interested candidates are to submit a curriculum vitae, a one page (minimum) or two page (maximum) summary of research and teaching interests at <https://jobs.virginia.edu/applicants/Central?quickFind=52261>. Three letters of reference are to be sent directly to phys-hep-exp-pos@virginia.edu (preferably), or to High Energy Physics Search Committee, Department of Physics, University of Virginia, 382 McCormick Road, P.O. Box 400714, Charlottesville, VA 22904-4714, USA

For information on our department, please visit our website at <http://www.physics.virginia.edu>.

The University of Virginia is an equal opportunity/affirmative action employer. Women and members of under-represented minorities are strongly encouraged to apply.



UNIVERSITY of VIRGINIA



Research Positions LIGO Laboratory

California Institute of Technology (Caltech) Massachusetts Institute of Technology (MIT)

The Laser Interferometer Gravitational-Wave Observatory (LIGO) has as its goal the development of gravitational wave astronomy. The LIGO Laboratory is managed by Caltech and MIT, and is sponsored by the National Science Foundation. It has built and now operates facilities equipped with laser interferometric detectors at Hanford, Washington and Livingston, Louisiana. The detectors have achieved design sensitivity and a data set spanning more than a year of coincidence operation has been collected. Analysis is ongoing, with extensive participation by the LIGO Scientific Collaboration (LSC). Further observation will be interleaved with incremental improvement of the instruments over the coming years, with a major upgrade (Advanced LIGO) in preparation. In addition, a vigorous R&D program supports the development of enhancements to the detectors as well as future capabilities.

The LIGO Laboratory expects to have positions at Caltech, MIT and at the two observatory sites. Scientists will be involved in the operation of LIGO itself, analysis of data, both for diagnostic purposes and astrophysics searches, as well as the R&D program for future detector improvements. Expertise related to astrophysics, modeling, data analysis, electronics, laser optics, vibration isolation and control systems is useful. Most importantly, candidates should be broadly trained physicists, willing to learn new experimental and analytical techniques, and ready to share in the excitement of building, operating and observing with a gravitational-wave observatory. In general, appointments will be at the post-doctoral level with one-year initial appointments with the possibility of renewal for up to two subsequent years. In some cases, appointments with an initial term of three years or of an indefinite term may be considered. Appointment is contingent upon completion of all requirements for a Ph.D.

Applications for positions at any LIGO Laboratory site (Caltech, MIT, Hanford, or Livingston) should be sent to HR@ligo.caltech.edu (Electronic Portable Document Format (PDF) submittals are preferred). OR mailed to either:

Dr. Jay Marx, c/o Cindy Akutagawa
Caltech
1200 E. California Blvd
LIGO 18-34
Pasadena, CA 91125

OR

Dr. David Shoemaker
MIT
185 Albany St
LIGO NW22-295
Cambridge, MA 02139

Applications should include curriculum vitae, list of publications and the names, addresses, email addresses and telephone numbers of three or more references. Applicants should request that three or more letters of recommendations be sent directly to HR@ligo.caltech.edu (Electronic Portable Document Format (PDF) submittals are preferred) or mailed to Dr. Marx or Dr. Shoemaker. Consideration of applications will begin December 1, 2007 and will continue until all positions have been filled.

*Caltech and MIT are Affirmative Action/Equal Opportunity Employers
Women, Minorities, Veterans and Disabled Persons are encouraged to apply*

More information about LIGO available at www.ligo.caltech.edu

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Experimental Particle Astrophysics, Fermilab Postdoctoral Research Associate

The Center for Particle Astrophysics at Fermilab invites applicants for postdoctoral research associate positions, to conduct experimental research in particle astrophysics in collaboration with one of the experimental groups associated with the Center. The groups currently consist of the Pierre Auger Observatory, the Sloan Digital Sky Survey (SDSS), the Cold Dark Matter Search (CDMS), the COUPP experiment, the Dark Energy Survey (DES), and the Supernova Acceleration Probe (SNAP).

These experiments cover a wide range of topics in the forefront of experimental astrophysics, and deploy instruments from South America to northern Minnesota to Earth orbit. They promise exciting opportunities in instrumentation and analysis for a young researcher, with graduate work completed in either particle astrophysics or particle physics. The laboratory maintains a vibrant research environment for its scientific staff, including colloquia, seminars, and travel support. The Center for Particle Astrophysics at Fermilab provides a venue for experimental and theoretical particle astrophysicists to work on forefront research problems in a setting encouraging interaction and collaboration.

Appointments are normally for three years with one-year renewals possible thereafter. Every effort will be made to maintain support for a Fermilab RA until he/she has the opportunity to produce physics results. Applications and requests for information should be directed to Dr. Wyatt Merritt, Chair, PACF Postdoc Committee via PACF_postdoc_apps@fnal.gov. Applications should include a curriculum vitae, publication list, research statement, and three letters of reference.

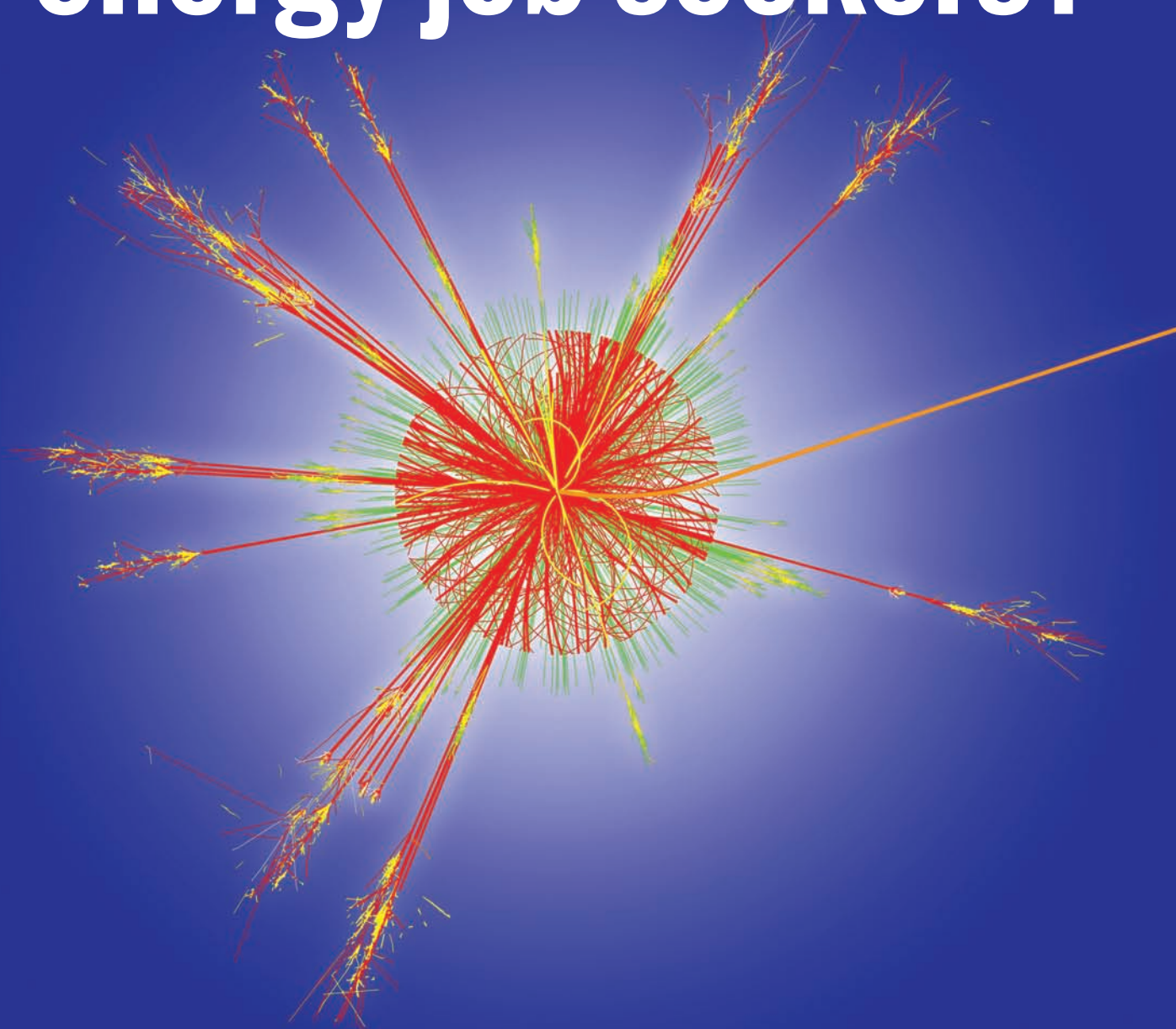


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