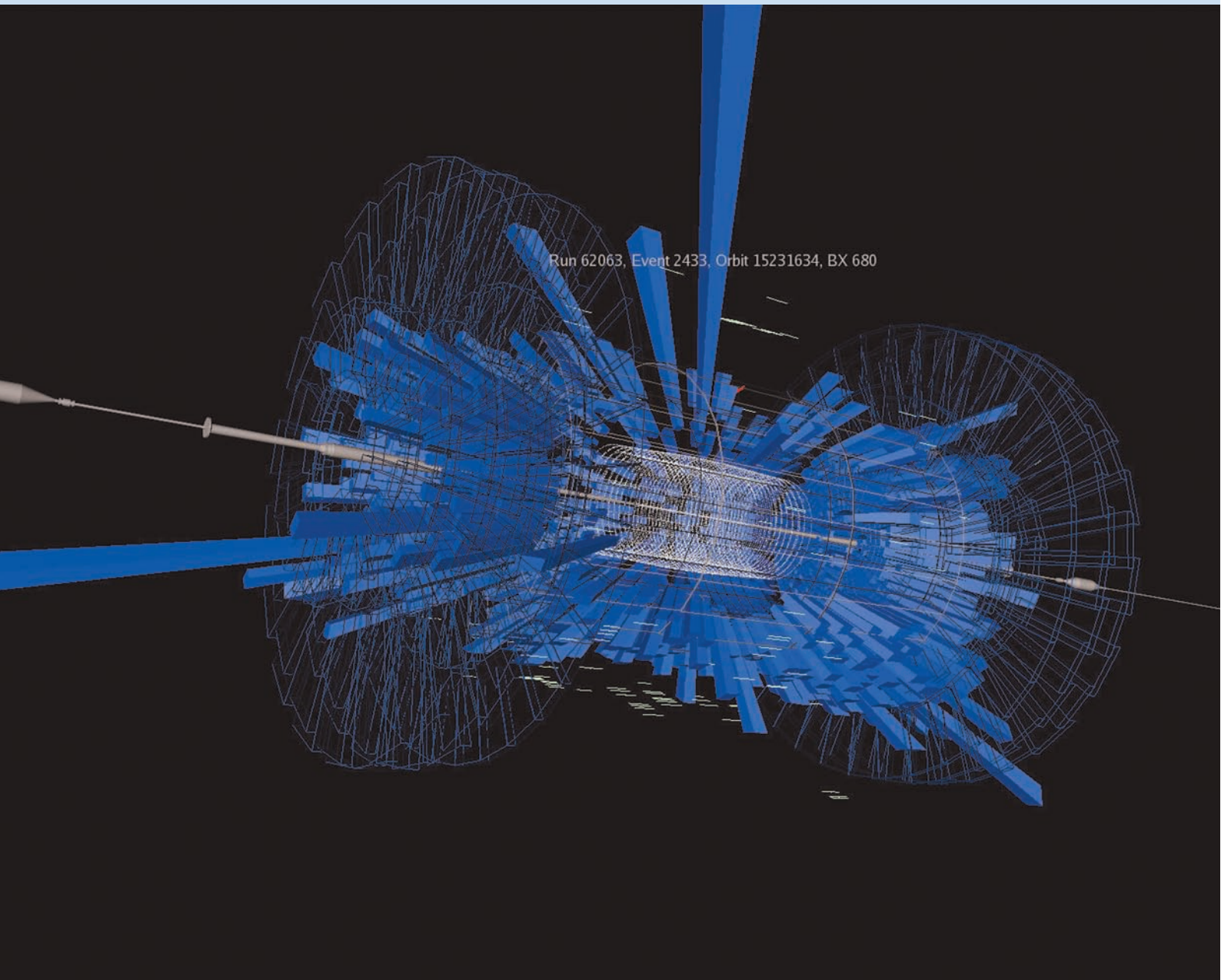


INTERNATIONAL JOURNAL OF HIGH-ENERGY PHYSICS



CERN COURIER

MEDIA PACK 2009



Run 62063, Event 2433, Orbit 15231634, BX 680

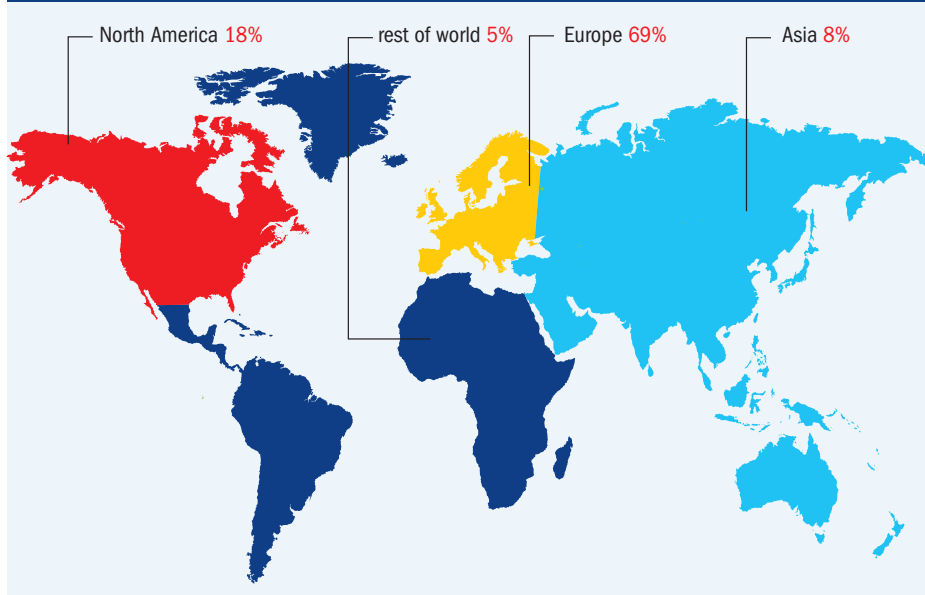
Image courtesy of CERN

Readership

CERN Courier is the reading matter of choice for the high-energy physics community, but it also goes into every other area of physics. In fact, nearly half of the *CERN Courier* readership work in areas other than high-energy physics, choosing *CERN Courier* to keep them up to date with developments in fundamental research. Published 10 times a year, *CERN Courier* is not just CERN's

in-house magazine; it has a worldwide distribution network in high-profile research centres and a global readership stretching across every major research institution. With a team of correspondents in more than 20 of the world's most significant laboratories, it reports on news and the latest research developments from across the world.

Readers – geographical breakdown



The Large Hadron Collider

CERN's flagship accelerator, the Large Hadron Collider (LHC), started up in September 2008. This world-leading facility, which will reach its full potential in 2009, serves physics communities based in more than 60 countries around the world. Their eyes, and indeed those of the broader scientific community worldwide, will be turning to *CERN Courier* during 2009 to follow developments as the first results begin to emerge from the experiments at the LHC. Advertising in *CERN Courier* will ensure that your marketing message appears in front of this influential audience in this high-profile year.

72 000*
READERS WORLDWIDE

*Publisher's own data

Which fields do *CERN Courier* readers work in?

- astrophysics and astronomy
- computing, software and IT
- cosmology
- cryogenics
- detector developments and imaging
- education
- electronics and data communication
- high-energy physics
- imaging, materials and instrumentation
- medical physics
- nuclear physics
- particle physics
- quantitative finance
- radio frequency, power supplies and engineering
- solid-state physics
- space research
- subatomic physics
- synchrotron radiation
- vacuum research

Who will your message reach?

Some examples of large-budget projects, where the procurement managers and key decision makers receive *CERN Courier*:

- Large Hadron Collider (LHC) at CERN: more than €3 bn
- Facility for Antiproton and Ion Research (FAIR): €1 bn until 2014
- JAERI-KEK Joint Facility for High Intensity Proton Accelerators (J-PARC): ¥133.5 bn until 2008
- Linac Coherent Light Source: \$315 m until 2009
- European X-ray laser project (XFEL): €908 m until 2012

Distribution

CERN Courier is distributed to all of these major research sites

Africa National Accelerator Centre, South Africa	Accelerator Laboratory of the Department of Physics (JYFL) at the University of Jyväskylä	Synchrotronstrahlungslabor (HASYLAB) Heavy-Ion Test Storage Ring (TSR) Helmholtz Institut für Strahlen und Kernphysik (HISKP) IonenstrahlLabor am Hahn Meitner Institute (ISL) Maier-Leibnitz-Laboratorium: Accelerator of LMU and TU Munich (MLL) Mainz Microtron (MAMI) Max Planck Institut für Kernphysik (MPI-HD)	South America Laboratorio Nacional de Luz Sincrotron (LNLS), Brazil Tandem Accelerator (TANDAR), Argentina	Cornell High Energy Synchrotron Source (CHESS) Crocker Nuclear Laboratory Duke Free Electron Laser Laboratory (DFELL) Fermi National Accelerator Laboratory Idaho Accelerator Center Indiana University Cyclotron Facility (IUCF) Lawrence Berkeley National Laboratory (LBNL) Los Alamos National Laboratory (LANL) Louisiana Accelerator Center National Superconducting Cyclotron Laboratory (NSCL) National Synchrotron Light Source (NSLS) Oak Ridge National Laboratory (ORNL) Particle Beam Physics Lab Relativistic Heavy Ion Collider (RHIC) Saskatchewan Accelerator Laboratory (SAL) Spallation Neutron Source (SNS) Stanford Linear Accelerator Center Stanford Synchrotron Radiation Laboratory Stony Brook Superconducting Linac (SBSL) Sudbury Neutrino Observatory Synchrotron Radiation Center Synchrotron Ultraviolet Radiation Facility (SURF II) Thomas Jefferson National Accelerator Facility (TJNAF) TRI-University Meson Facility/ National Meson Research Facility (TRIUMF)
Asia Beijing Electron Positron Collider, China Beijing Synchrotron Radiation Facility, China INDUS I and II, India National Laboratory for High Energy Physics (KEK), Japan National Synchrotron Radiation Laboratory, China Nuclear Science Centre, India Pohang Light Source, Korea Raja Ramanna Centre for Advanced Technology, India RIKEN, Japan Super Photon ring – 8 GeV (SPRING-8), Japan Synchrotron-light for Experimental Science and Applications in the Middle East (SESAME), Jordan Synchrotron Radiation Research Center, Taiwan Variable Energy Cyclotron Centre (VECC), India	France Centre d'Etudes et de Recherches par Irradiation CNRS (CERI) Centre national de la recherche scientifique (CNRS) European Synchrotron Radiation Facility (ESRF) Grand Accélérateur National d'Ions Lourds (GNAIL) Laboratoire pour l'Utilisation du Rayonnement Electromagnétique (LURE) Source Optimisée de Lumière d'Energie Intermédiaire du LURE (SOLEIL)	Italy Double Annular Factory for Nice Experiments (DAFNE) ELETTA Istituto Nazionale di Fisica Nucleare (INFN) Laboratori Nazionali di Frascati (LNF)	Sweden Manne Siegbahn Laboratory (MSL) MAX-Lab, Lund University Royal Institute of Technology (KTH) The Svedberg Laboratory (TSL)	
Australia Australian Synchrotron	Germany Angströmquelle Karlsruhe (ANKA) Berliner Elektronenspeicherung- Gesellschaft für Synchrotronstrahlung (BESSY) Cooler Synchrotron (COSY) Deutsches Elektronen Synchrotron (DESY) Dortmund Electron Test Accelerator (DELTA) Electron source with high brilliance and low emittance (ELBE) Electron Stretcher Accelerator (ELSA) Forschungszentrum Rossendorf (FZR) Free Electron Laser in Hamburg (FLASH) Gesellschaft für Schwerionenforschung (GSI) Hamburger	Netherlands Accelerateur Groningen-Orsay (AGOR) National Institute for Nuclear Physics and High Energy Physics (NIKHEF)	Switzerland Centre Europeen de Recherche Nucleaire (CERN) Paul Scherrer Institut (PSI)	
Belgium Cyclotron of Louvain la Neuve (CYCLONE)		Russia Budker Institute of Nuclear Physics Institute for High Energy Physics (IHEP) Institute for Theoretical and Experimental Physics (ITEP) Joint Institute for Nuclear Research (JINR)	UK Diamond Rutherford Appleton Laboratory (RAL) Synchrotron Radiation Source Daresbury	
Denmark Aarhus Storage Ring in Denmark (ASTRID) Institute for Storage Ring Facilities in Aarhus		Spain ALBA	US and Canada 88-Inch Cyclotron Advanced Light Source Alternating Gradient Synchrotron (AGS) Argonne National Laboratory (ANL) Bates Linear Accelerator Center, Massachusetts Institute of Technology (MIT-Bates) Brookhaven National Laboratory (BNL) Canadian Light Source (CLS) Center for Advanced Microstructures and Devices (CAMD) Cornell Electron-Positron Storage Ring (CESR)	
Finland				

CERN Courier show calendar 2009

Issue	Show(s)	Editorial
Jan/Feb	AAAS 2009, US	
Mar	APS March Meeting, US; DPG Condensed Matter & EPS Meeting, Germany; DPG Darmstadt, Germany; CHEP 2009, Czech Republic; IPOT 2009, UK	
Apr	MRS Spring Meeting, US; APS April Meeting, US	
May	EGEE Spring Meeting, Switzerland; PAC 2009, Canada; SVC 52nd Annual Meeting, US	
Jun	ISC, Germany; CEC-ICMC 2009, US	Rubbia Fest – <i>CERN Courier</i> will report on the 75th birthday celebrations of the ex-CERN DG and Nobel prize winner Carlo Rubbia
July/Aug		50th anniversary of <i>CERN Courier</i> (with additional distribution at Lepton Photon and the EPS HEP meeting)
Sep	EGEE Autumn Meeting, Switzerland; Synchrotron Radiation User Meeting, UK	
Oct	Semicon Europa, Germany; Frankfurt Book Fair, Germany	Nobel prize issue celebrating the 10th, 25th and 30th anniversaries of the Nobel prizes won at CERN
Nov	MRS Fall Meeting, US	20th anniversary of LEP and the 50th anniversary of PS (with additional distribution at these celebrations)
Dec		50th anniversary of DESY

Display advertising solutions

Print

Advertising

As well as offering standard display solutions to help you to reach readers, we can create a bespoke package to help you to increase your brand exposure and promote products, services and developments tailored to your budgets and marketing schedule.

Advertorials

Enhance your company or brand presence to get ahead of the competition with an advertorial that will deliver your marketing message to your target prospects. Previous clients include SAES Getters, Hewlett-Packard, Instrumentation Technologies, OCEM and Babcock Noell.

Reprints

If your product or company features in a *CERN Courier* article, or if a colleague writes an editorial piece for us, reprints can play an important part in enhancing your marketing campaign. You can:

PHOTONIS Your partner for new detection solutions

Advanced Light Detector Photo Multiplier Tubes Extreme Detectors

Hybrid Photo Detector (HPD), PLANAON, Image Intensifier Tubes, MCP/PMT

SP 2020 large area PMT's, Ultra-Fast Timing PMT's, High-Current PMT's

High Resolution & Gamma Flux, Ultra-Fast Timing Tubes, Microchannel Plates for Extreme UV and X-ray optics, UV-detection and Imaging in Space

PHOTONIS INTEGRATED DETECTOR SOLUTIONS

www.photonis.com

ADVERTISEMENT FEATURE

SAES® Getters' SORB AC Getter Wafer Modules Boost UHV Conditions at Shanghai Synchrotron Radiation Facility (SSRF)

The Shanghai Synchrotron Radiation Facility (SSRF) is a third-generation synchrotron light source designed to meet the growing demand for synchrotron radiation in China. It consists of a 4.22 m circumference storage ring operating at 3.5 GeV, a 3000mA electron beam, and several beam lines and experimental stations. It will be the largest synchrotron in China and the fourth largest worldwide. Once fully operative, more than 60 beam lines will be made available to users for a variety of studies, encompassing macromolecular crystallography, XAFS, hard X-ray microfocus, X-ray imaging and biomedical applications, soft X-ray spectroscopy, diffraction and small angle X-ray scattering. The synchrotron ring, which is all housed under construction at Zhang Jiang High Tech Park in Shanghai, is supposed to begin the commissioning phase by the end of 2008.

One of the key challenges faced during the project has been the achievement and maintenance of a suitable vacuum level, especially at full beam current when large gas loads are generated by synchrotron radiation along the ring and in specific areas like the catch absorbers. A pressure design value of $<1 \times 10^{-7}$ mbar during machine operation and 10^{-8} mbar under static conditions has been set for SSRF.

To ensure this challenging target the vacuum ring is covered by more than 3000 ion pumps, most of which integrate inside gas valves a SAES® SORB AC Getter Wafer Module (mainly of the WP 2350-01 707 type).

The integration of SAES® NEG Wafer Modules inside ion pumps is a well known and proven approach which has been used in South Korea at APS at Argonne National Laboratory. The Getter Wafer Modules are available in two getter alloys (SR 707 and SR 202) and come in a range of compact sizes. They feature pumping speeds for hydrogen between 400 and 1200 l/s, significantly boosting ion pump performances, ion pumps, in fact, lose their pumping efficiency for hydrogen in the 10^2 mbar range and below. Being hydrogen the main residual gas in UHV systems, this one creates inconveniences during the machine operations, especially in the high gas load regions. The Getter Wafer Modules provide therefore a simple and cost effective way to significantly increase speed and capacity for hydrogen as well as for the other gases right where this is most required.

A picture of a NEG module mounted inside the ion pump installed at SSRF is showed in the picture.

Given its compact size, the module can be easily mounted inside the ion pump. Activation is generally accomplished by passive heating during the ion pump bake-out, or, preferably, by direct passage of current through the module length. Modules have high capacity for gases and are rugged pumps, so once installed they do not need to be replaced, but just reactivated from time to time or after ion pump venting for maintenance and shut-downs. This is possible, as for other getter pumps, a large number of times, generally more than 50. However, if required after extensive operation or for any other reasons, modules can be easily replaced. This provides extra safety and reliability to the entire vacuum system, since the replacement operation is very simple and does not affect at all the ion pump performance.

Extensive testing of Wafer Getter Modules inside ion pumps of different vendors is ongoing in several synchrotron light sources which are being built or designed in Europe and in Asia.

In particular, investigations carried out at SSRF have showed that after getter module activation, vacuum in the 10^{-7} mbar range is obtained, fully meeting the demanding vacuum requirements of this light source.

For more information:
 Steve Hines
 Business Area Manager Vacuum Systems
 Phone: +39 02 8337444
 e-mail: steve_hines@saes-getters.com
 www.saesgetters.com

Online

The website has recently been redesigned to maximize usability for both visitor and advertiser. Our aim is for *cerncourier.com* to be a leading website for the physics community, so link up with us to extend the reach of your online activity.

Star product

- A priority position on the home and products pages.
- Enhanced exposure: your product listing remains in the archive and in your company listing until you choose to delete it.

Sponsored search terms

This is an innovative way of driving quality, focused traffic direct to your website.

International Journal of High Energy Physics

CERN COURIER

Latest Issue: Archive, CNA, Jobs, Links, Super's guide, Items, Contact us

WELCOME

The CERN Courier website brings you online articles from the print magazine and a range of resources for the high-energy physics community.

FEATURE OF THE MONTH

French Minister's talent for ingenious invention

Colleagues and friends of French Minister recall some of his major contributions to experimental particle physics

Continue reading the Feature of the Month archive

NEWS

CERN Council looks forward to imminent start-up of the LHC

Protons knock on the LHC's door

GLAST in orbit to explore extreme universe

Protons and neutrons certainly prefer each other's company

High-energy physics labs become 'HEPNET'

CNS completes milestone installation of beam pipe

FEATURES

The step-start approach to rare isotope beams

Don Mirone investigates plans to reconstruct rare isotope beams

The Super-LHC is on the starting blocks

The Super-LHC is under way

TRIO Takai to Kamikita

Commission is in full swing in Japan on the new facility to send neutrinos from JPARC to the Super-Kamiokande detector

DAFNE provides a fine electron source

An electron test beam at the Frascati @-factory offers

KEY SUPPLIERS

1

2

3

FEATURED COMPANIES

HIDEN ANALYTICAL

TUG

ET Enterprises

CeramTec

1 Key supplier

This provides you with detailed representation on *cerncourier.com*, offering essential information to our users and capturing sales leads in the process by building a multipage microsite.

2 Banner advertising

- A top-level banner gives you presence throughout the site.

3 Featured company

- Extremely high visibility: located on the homepage.
- Your logo and link alongside relevant editorial.
- A detailed listing in our company finder.
- Monthly reports to quantify your return on investment.

“Advertising in *CERN Courier* and *cerncourier.com* has increased our visibility among the key audience and resulted in opportunities that we would not have otherwise seen.”

Thoms Schmidt, FuG Elektronik GmbH

cerncourier.com

31 000*

unique visitors a month

*Publisher's own data based on Google Analytics' year-to-date average, January–September 2008.

Contact the display sales team Ed Jost, tel +44 (0)117 930 1026, e-mail edward.jost@iop.org

Recruitment advertising solutions

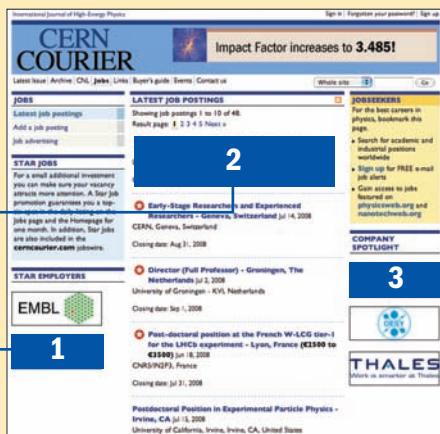
Online

1 Star employer

- A highly visible animated banner on the jobs page for the duration of booking.
- A standard listing on the jobs page or a hyperlink to your chosen URL.

2 Star job

- A featured flag at the top of the jobs page for the duration of the booking.
- Homepage exposure for the duration of the booking.
- A jobswire listing sent to 9600 subscribers for the duration of the booking.



3 Company spotlight

- Premium logo positioning on the jobs homepage.
- Logo click-through to the company profile page.
- A standard listing on the jobs page.
- Listings in the weekly jobswire.

Text listing

- One month's exposure on the jobs page.
- High visibility: initial homepage exposure.
- Inclusion in the weekly jobswire.

Print

CERN Courier's status as a highly valued resource in the physics community offers you a direct route to skilled job seekers in high-energy physics, scientific computing and related areas. The dedicated recruitment section in the magazine directs our 72 000 readers to your vacancy. They are looking for positions ranging from graduate to senior level, including:

- heads of industry
- chairs
- lecturers
- research associates
- fellowships
- postdoctorates
- engineers



“Many of our scientific positions have been advertised through *CERN Courier* and *Physics World*. We have always been rewarded with a remarkable number of worthy applications and we have enjoyed the professional and friendly services of their dedicated staff.”

Personnel Office of the International Centre for Theoretical Physics, Abdus Salam

Job adverts in **CERN Courier** benefit from up to **eight weeks' free exposure** on **cerncourier.com** and **physicsworld.com**, reaching

224 036*
visitors per month

*Combined visitor numbers to cerncourier.com (45 849) and physicsworld.com (178 187) based on Google Analytics data, three-month average, July–September 2008.

Contact the recruitment sales team Moo Ali, tel +44 (0)117 930 1264, e-mail moo.ali@iop.org

Advertising rates (sterling)

Display

CERN Courier display advertising rates 2009 (£)

	1x	5x	10x
Full page			
Full colour	4258	4003	3832
Mono	3239	3045	2915
Half island			
Full colour	3119	2932	2807
Mono	2399	2255	2159
Half vertical			
Full colour	2804	2636	2524
Mono	2200	2068	1980
Half horizontal			
Full colour	2804	2636	2524
Mono	2200	2068	1980
Third vertical			
Full colour	2105	1979	1895
Mono	1717	1614	1545
Quarter			
Full colour	1559	1465	1403
Mono	1349	1268	1214
Eighth			
Full colour	1013	952	912
Mono	814	765	733

Subject to change

Online display advertising rates 2009 (£)

	Duration	£
Featured company	12 months	1325
Top-level banner	1 month	975
Skyscraper banner	1 month	975
Buyer's Guide sponsorship banner	1 month	500
Key supplier		
5-page site	12 months	5000
10-page site	12 months	10000
Latest issue alert sponsorship	1 month	400
Sponsored search terms, 3 words	6 months	1000
	12 months	1500
Star product	12 months	500
Feature product	12 months	350

Subject to change

Recruitment

SCC rates (£)*

	non-university	university
Mono	64	58
Spot colour	66	61
Full colour	68	64

Subject to change

*Single column centimetre

Set size discounts – mono (£)

	non-university
Quarter page	1498
Half page	2995
Full page	5990
Double-page spread	10649

Subject to change

Example bespoke sizes – mono (£)

	non-university	university
5 cm x 2 col	640	580
10 cm x 2 col	1280	1160
12 cm x 2 col	1536	1392
15 cm x 2 col	1920	1740
10 cm x 3 col	1920	1740
20 cm x 3 col	3840	3480

Subject to change

Online rates (£)

	non-university	university
Text listing	545	260
Star job	695	395
Star employer	620	350
Company spotlight	950	450
Site-wide banner	1200	700

Subject to change

Contact the display sales team Ed Jost, tel +44 (0)117 930 1026, e-mail edward.jost@iop.org
Tom Houlden, tel +44 (0)117 930 1219, e-mail tom.houlden@iop.org

Contact the recruitment sales team Moo Ali, tel +44 (0)117 930 1264, e-mail moo.ali@iop.org

Mechanical information

Display advertising

FULL-PAGE BLEED
219 × 288 mm
8⁵/₈ × 11⁵/₁₆ inches

TRIM SIZE
213 × 282
8³/₈ × 11¹/₁₆

NO BLEED
193 × 262
7⁵/₈ × 10⁵/₁₆

Print adverts

Adverts should be supplied as high-resolution PDF files, although we can usually accept TIFF, JPEG and EPS files. All files must be 300 dpi and CMYK with fonts embedded.

QUARTER
91 × 125
3⁹/₁₆ × 4⁷/₈

HALF ISLAND
120 × 193
4¹¹/₁₆ × 7⁵/₈

THIRD VERTICAL
63 × 262
2¹/₂ × 10⁵/₁₆

THIRD SQUARE
125 × 125
4⁷/₈ × 4⁷/₈

HALF HORIZONTAL
193 × 125
7⁵/₈ × 4⁷/₈

Dimensions given in millimetres/inches

Online advertising

All banners and logos must be supplied as GIF, JPG or Flash files with "alt" text and a URL to which to link the banner or logo.

The maximum length of animation for animated GIF and Flash files is 15 seconds, with a maximum of three loops through the animated sequence.

The following additional specifications apply to Flash adverts:

- An alternative GIF or JPG image file must be provided as a graceful degradation option for browsers that do not support Flash.
- Subsequent downloading is not permitted.
- Expansion is not permitted.
- Any audio included may only play when initiated by the user.
- Adverts must have a solid background colour (i.e. not transparent).
- Advertisers must warrant that they have tested adverts for technical stability on Internet Explorer, Firefox, Opera and Safari browsers prior to supply. For the purposes of these guidelines, stability is defined as not causing error messages, dialogue windows, excessive CPU usage, browser crashes or system crashes.

VAT

All UK and European Union advertisers are subject to VAT at 17.5%. EU advertisers outside the UK supplying their MWst/TVA/VAT numbers are exempt from VAT.

Recruitment advertising

FULL PAGE
26 cm × 4 col
10¹/₄ inches × 4 col

The column length is 26 cm (10¹/₄ inches) and a full page is four columns wide. Adverts can span one, two, three or four columns (below are some of the most popular options). The sales team is happy to advise on advert sizes geared to the amount of text and budget available.

HALF VERTICAL
26 cm × 2 col
10¹/₄ inches × 2 col

QUARTER
13 cm × 2 col
5¹/₈ inches × 2 col

CREDIT CARD
5 cm × 2 col
1¹⁵/₁₆ inches × 2 col

Size and shape specifications for online adverts

	Dimensions (pixels)	Max. file size GIF, JPG (KB)	Max. file size animated GIF, Flash (KB)
Site-wide banner	468 × 60	20	40
Square banner	160 × 160	15	20
Star employer logo	160 × 60	5	N/A
Company spotlight logo	160 × 60	5	N/A
MPU banner	300 × 250	20	40
Skyscraper banner	160 × 600	20	40
Category banner	468 × 60	20	40
Corporate partner logo	160 × 60	5	N/A
Key supplier logo	160 × 60	5	N/A