<u>During the ICM2006 International Congress of Mathematicians Opening</u> Ceremony

His Majesty the King will present the Fields Medals, the "Nobel Prizes" for Mathematics

- A press conference with the winners will be held on Tuesday, the 22^{nd} of August, in Madrid, at the Palacio Municipal de Congresos (Campo de las Naciones).
- Press representatives wishing to attend are kindly requested to register before the 15th of August, writing to pressoffice@icm2006.org
- Embargoed information about the winners will be available from the 15th of August, to those media who ask for it and explicitly accept the embargo conditions.

The Fields Medals are the most important international prize in the world of mathematics. They are awarded by the International Mathematical Union (IMU) every four years at the ICM (International Congress of Mathematics), and on this occasion His Majesty King Juan Carlos I will be presiding over the award ceremony to be held this coming August 22nd at the Palacio Municipal de Congresos (Campo de las Naciones), in Madrid. The Nevanlinna and Gauss Prizes will also be awarded during the ceremony.

The ceremony will mark the opening of the ICM2006 International Congress of Mathematicians, an 8-day event that will be attended in the Spanish capital by some 4,000 mathematicians from all over the world.

The Fields Medals are gold-minted. Their obverse shows Archimedes facing right and the motto "Transire Suum Pectus Mundoque Potir": "To transcend one's spirit and to take hold of (to master) the world". On the reverse side, the inscription "The mathematicians having congregated from the whole world awarded (this medal) because of outstanding writings". The name of the Medalist, not visible on the photos, is engraved on the rim of the medal.

The medals are named after the Canadian mathematician John Charles Fields (1863-1932) and were first awarded at the International Congress held in Oslo in 1936. The prestige attached to these awards is matched by their symbolic significance, as well as by the strictness of their rules.

Only four such Medals can be awarded at each ICM, and only those mathematicians below the age of 40 (on January 1st of the year in which the Congress is held) are eligible to receive them. This is because they are awarded

for work achieved - not a single, isolated achievement but a body of work - and are meant to encourage future endeavour.

Another feature, no less strict, attached to these Medals is the secrecy surrounding the award-winners themselves, whose identity must remain confidential until the presentation ceremony. The winners are chosen by a committee whose members must also remain anonymous, and who are sworn to secrecy until the official public announcement of their decisions. The award-winners are notified separately a few weeks before the official presentation, although they too are unaware of which of their colleagues have been chosen to receive the prizes.

Though the prestigious value of the Medals is high, the monetary award of 9,500 US dollars they carry can scarcely be compared to that attached to the Nobel Prizes. Nevertheless, they fulfil the condition established by Fields himself: "To be minted in gold equivalent to at least 200 dollars". Naturally, 200 dollars at their value in 1933. However, according to the Fields Institute, there have been times when the award has been worth far more than its weight in gold, such as at the end of the Second World War when one of the first Medal-winners, the Finnish mathematician Lars Ahlfors, honoured in 1936, was able to be reunited with his wife in Zurich after paying with his Medal the 10 crowns he needed to leave his country.

The Nevanlinna and Gauss Prizes

The Nevanlinna Prize has been awarded every four years since 1982 in recognition of the most notable advances made in mathematics in the Information Society (e.g. computational science, programming languages, algorithm analysis, etc.). This prize consists of a gold medal bearing the profile of Rolf Nevanlinna (1895-1980), rector of the University of Helsinki and president of the IMU (International Mathematical Union). Nevanlinna was the first mathematician to introduce computation into Finnish universities in 1950.

The ICM in Madrid will be the very first occasion on which the Gauss Prize has been awarded. This prize will be presented in recognition of advances in mathematics that have had most impact on technological development and daily life. The award takes its name from Carl Friedrich Gauss (1777-1855). Gauss, known as the "Prince of Mathematics", is universally recognized as one of the most outstanding mathematicians of all time. In 1801, he put forward a revolutionary idea for calculating the orbit of the asteroid Ceres, which disappeared from the heavens after being discovered. Thanks to Gauss' least squares' method, Ceres was located again. This award consists of a medal with portrait of Gauss on the obverse and a curve symbolizing the orbit of Ceres, a circle (the asteroid) and a square (the method) on the reverse.

Links:

-About the Fields Medals (in English)
http://www.fields.utoronto.ca/aboutus/jcfields/fields_medal.html

-About all the awards: http://www.icm2006.org/imuawards/

PRESS CONFERENCE

Tuesday, the 22nd of August. Time to be determined Palacio Municipal de Congresos (Campo de las Naciones), Madrid

Press representatives are kindly requested to apply for press accreditation before the 15th of August. Please send your name; media; passport in the case of non-Spanish nationals; telephone; and e-mail to pressoffice@icm2006.org.

EMBARGOED INFORMATION

Embargoed information about the winners will be available from the 15th of August, to those media who ask for it (at pressoffice@icm2006.org) and explicitly accept the embargo conditions. The embargo will hold until the 22nd of August at 12.00, Madrid time.

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