The Ampère Congresses, held every two years in a European city, provide the main international forum for the discussion of advances in magnetic resonance and radiodifunctionality in Europe. Following the first fundamental discoveries thirty years ago, interest in the subject rapidly gathered momentum and on the initiative of Professor Freymann the first Colloque Ampère was held in France in 1952. The initial letters of the descriptive phrase 'Atomes et Molecules Par Etudes Radio-Electriques' coined by Freymann furnished an excellent excuse to name the new group in honour of Ampère. Over the past twenty years interest in the Groupement Ampère has spread throughout Europe; recent Congresses have been held in Rijeka (1966), Grenoble (1968), Bucharest (1970), Turku (1972). With the foundation of the European Physical Society, the Groupement Ampère became a constituent founding member, providing the interests of physicists in its subject area.

Five hundred participants foregathered in Nottingham, 9-14 September for the 18th Ampère Congress. They came from thirty-three countries, most European countries among them, representing all the continents of the world. The scientific programme included sixteen invited papers in areas of topical and growing interest given by speakers not recently seen in this role at Ampère Congresses. Professor Mössbauer (Munich and Grenoble) gave the proceedings a good send-off with an opening lecture on the application of resonance scattering of γ-rays to the solution of the famous phase problem in crystallography. Of the 300 contributed papers one of the most popular areas of activity was ordered magnetic materials whether studied by Mössbauer absorption, by NMR, or by ferromagnetic resonance or by far infrared radiation. One invited paper in this area was given by Professor Stevens (Nottingham) on the theory of exchange interactions in rare earth insulators. Another was on NMR in antiferromagnets by Professor Borovik-Romanov (Moscow), who led a large group of participants from the Soviet Union, which included three other well-known invited speakers Professors Khutsishvili (Tbilisi), Kocheleyev (Kazan) and Provotorov (Moscow).

A second area of continuing high activity is that of magnetic resonance applied to metals, alloys, semiconductors and superconductors. Complementary invited papers on EPR in superconductors were given by Professors Kochelev and Orbach (California). Breaking new ground for Ampère conferences Dr. Leggett (Sussex) discussed the role of broken spin-orbit symmetry in the probably unique type of ordering disclosed by NMR in the two new millidegree phases of liquid 3He.

One of the high-lights of the conference was the paper by Professor Lau-terbur (New York) on NMR Zeugmatography. The name alone catches the imagination but his paper and the contributed papers in the sessions which followed showed that image formation by NMR is a fascinating new growth area with potentialities in physics, biology and medicine. Other applications of magnetic resonance in biophysics occupied three sessions, in one of which Dr. Edmonds (Oxford) described the successful application of nuclear double resonance to the...
Meetings

For a full list of events see the latest Meetings Issue of Europhysics News 5, 11 (November 1974). Notification of the meetings announced in this issue has been received recently.

The order of information is: date, title, venue, and contact for information.

Conferences 1975

10 - 11 April
2nd International Conference on Ternary Semiconducting Compounds
Strasbourg, France
C. Schwab, Laboratoire de Spectroscopie et d'Optique du Corps Solide, F - 67084 Strasbourg Cedex

10 - 16 June
International Conference on Amorphous and Liquid Semiconductors
Leningrad, USSR
A.R. Regel, A.F. Ioffe Physico-Technical Institute, 194201 Leningrad

16 - 23 June
International Conference on Neutrino Physics, Balatonfured, Hungary
G. Jénax, Department of Atomic Physics, Eötvös University, Puskin Str. 5, Budapest VII

11 - 15 August
European Conference on Astronomy
Leicester, UK
K.A. Pounds, Department of Physics, University Road, Leicester LE1 7RH

11 - 20 April 1975
Physics of Non-Equilibrium Systems: Fluctuations, Instabilities and Phase Transitions
Geilo, Norway
G. Jarrett, Institutt for Atomenergi, P.O.Box 46, 2007 Kjeller

14 - 28 July
Physics and Astrophysics of Neutron Stars and Black Holes
Varenna, Italy
R. Ruffini, School of Natural Sciences, The Institute for Advanced Study, Princeton, N.J. 08540, USA

3 - 12 September
Solid State Imaging
Louvain-la-Neuve, Belgium
P. Jespers, Bâtiment Maxwell, Université Catholique de Louvain, B - 1348 Louvain-la-Neuve

10 - 14 November
Magnetism and Neutron Scattering — Strongly Correlated Electrons
Gaussig, near Dresden, DDR
K. Eik, Sektion Physik, Technische Universität, Mommsenstrasse 13, DDR - 8027 Dresden

‘Summer’ Schools 1975

11 - 20 April 1975
Physics of Non-Equilibrium Systems: Fluctuations, Instabilities and Phase Transitions
Geilo, Norway
G. Jarrett, Institutt for Atomenergi, P.O.Box 46, 2007 Kjeller

14 - 28 July
Physics and Astrophysics of Neutron Stars and Black Holes
Varenna, Italy
R. Ruffini, School of Natural Sciences, The Institute for Advanced Study, Princeton, N.J. 08540, USA

One fundamentally important area of magnetic resonance and of radio­spectroscopy is that of atomic and molecular beam resonance, and yet few papers are offered in this corner of the subject at Ampère meetings. We were therefore fortunate to have a survey by Dr. Sandars (Oxford) of recent developments in this field of research to metastable states, to short-lived isotopes, to extremely high precision measurements and to the search for violations of parity and time-reversal invariance.

Two high points of the Congress occurred on the Friday. The Congress took the opportunity to celebrate the 200th anniversary of the birth of Ampère. Professor Kastler (Paris) gave an outstanding lecture of fascinating interest on the life and work of his great compatriot. In the evening the Congress Dinner was held, after which the guests enjoyed a witty and entertaining speech from Professor Abragam (Paris).

After the closing words of the President, Professor Lösche (Leipzig) and the Secretary-General, Professor Béné (Geneva), participants returned to their distant homes to tell their children they had met the present-day Sheriff of Nottingham, and that they had visited Nottingham Castle and Sherwood Forest, the old-time haunts of the mediaeval English hero, who became the natural symbol of the Nottingham Ampère Congress, namely Robin Hood.

E.R. Andrew, Nottingham