

## **Report of Affiliated Commission AC.2 for 2012-13 submitted by Beverly K. Berger, Secretary**

The principal event of the year for the International Society on General Relativity and Gravitation (AC2) was the triennial GR conference. GR20 was held in July 2013 at the University of Warsaw jointly with Amaldi10 (in the Amaldi series organized by GWIC and sponsored by IUPAP via AC2). There were 845 registered participants. Sponsorship from IUPAP for both meetings, and AC2's own limited funds, assisted some of these participants. As usual, the conference had plenary talks in the morning, covering the whole field of AC2's (and GWIC's) interests. In the afternoons there were parallel contributed papers and poster sessions. There were 20 plenary talks (4 of the speakers being women) and 23 parallel sessions (4 of the chairs being women). A book containing abstracts of all submissions was circulated. The abstracts of all talks and posters and the slides from the plenary talks are available on the conference website (<http://gr20-amaldi10.edu.pl>). Proceedings will be published by *General Relativity and Gravitation*, AC2's journal.

During the meeting, the first annual IUPAP General Relativity and Gravitation Young Scientist Prize was presented to Lisa Barsotti (LIGO Lab, MIT). While subsequent prizes will be awarded and announced annually, the formal presentations will take place at the triennial GR meetings. Through the generosity of Abhay Ashtekar, all winners will receive a travel grant to enable attendance at the meeting. The triennial Ehlers and Bergmann-Wheeler Prizes (for the best PhD theses in classical and quantum gravity respectively) were presented to Aseem Paranjape (ETH Zurich) and Aron Wall (UC Santa Barbara). The annual GWIC thesis prize (for which AC2 acts as fund-holder) was presented to Paul Fulda (Florida). The Hartle Prizes for student presentations at the meeting were awarded to Majd Abdelqader (Queens U, Canada), Valentina Baccetti (Victoria U, Wellington), Christopher Berry (Cambridge), Sydney Chamberlin (U Wisconsin, Milwaukee), Stephanie Erickson (Southampton), Oliver Gerberding (Albert Einstein Inst.), Lisa Glaser (Niels Bohr Inst.), Gavin Hartnett (UC Santa Barbara), Giuliana Russano (Trento), and Antonia Zipfel (Erlangen-Nurnberg). The Chandrasekhar Prizes for postdoctoral presentations at the meeting were awarded to Alexandre Le Tiec (Maryland), Charles Melby-Thompson (Tokyo), Eric Perlmutter (Cambridge), and John Veitch (Nikhef). Regrettably, the funding foundation FORTH (Greece) was forced by financial considerations to withdraw its support for AC2's Xanthopoulos Prize, which has been discontinued until further notice. The Society also awarded Fellowships to Yvonne Choquet-Bruhat, Nathalie Deruelle (Paris), George Ellis (Capetown), Eanna Flanagan (Cornell), Stefan Hollands (Cardiff), Werner Israel (Victoria), Balasubramanian Iyer (Raman Inst.), Luis Lehner (Perimeter), Ezra Newman (Pittsburgh), Peter Saulson (Syracuse), Bernard Schutz (AEI), Masaru Shibata (Kyoto), Tarun Souradeep (IUCAA), Takahiro Tanaka (Kyoto), and Robert Wald (Chicago).

AC2 sponsored its first event for representatives of our national organizations which range in character from mailing lists to independent societies. Many are groups within larger physics societies. The representatives presented brief summaries of their organizations. Discussions centered on common issues and possible future joint activities. Representatives from organizations in Australasia, Canada, China, Germany, India, Japan, Poland, Russia, South Africa, Spain, UK, and USA participated while those from Greece sent comments which were presented to the group. Efforts are already underway to continue the communications among these organizations and with AC2.

The Commission itself (alias the Society's Committee) held 3 meetings during GR20. IUPAP support for Commission meetings was used to enable a number of less wellfunded members, in particular IUPAP representatives, to be present. The first meeting reviewed the previous three years' activities and included reports from the editors of the Society's journal, from GWIC, newly reconstituted as WG11, from IUPAP C&CC meetings, and from its

information website <http://hyperspace.aei.mpg.de/>. One topic of discussion was the status of AC2's review volume to celebrate the 2015 centennial of general relativity. The volume, edited by A. Ashtekar et al, will be published by Cambridge University Press. The component chapters are currently in progress by a distinguished list of authors. The second meeting was to hear bids for the site of the next meeting. It was agreed that GR21 will be held in New York City in July 2016. This recommendation was accepted by the General Assembly of the Society, which also elected new officers and committee members in accordance with the constitution. Gary Horowitz became President, Beverly Berger was reelected as Secretary, while the previous president, Malcolm MacCallum, automatically became Deputy President. The Assembly also reviewed membership, finance and administration and heard the reports from the journal, GWIC, IUPAP, and Hyperspace.

The third committee meeting was to discuss future plans. AC2 is exploring suitable ways to mark the centennial. Heavy emphasis will be placed on coordination with the national organizations. The AC2 website will provide links to national events. Other activities such as a worldwide series of talks on 25 November 2015, the centennial of Einstein's final lecture introducing GR, are under consideration.

By a long-standing agreement, IUPAP appoints four members of the AC2 committee, each for a six-year term, two changing after every GRn conference. AC2 itself nominates possible IUPAP members, seeking, in doing so, to improve geographic, subject and/or gender balance among its members. The two members retiring in 2013 are Nigel Bishop (South Africa) and Yongge Ma (China). The continuing IUPAP members are Nadja Magalhaes (Brazil) and David McClelland (Australia). AC2 proposes as the new IUPAP members Rong-Gen Cai (China) and Sharon Morsink (Canada).