

**DIVISION X**                      **RADIO ASTRONOMY**  
*(RADIOASTRONOMIE)*

**PRESIDENT**                      **Ren-Dong Nan**  
**VICE-PRESIDENT**              **Russ Taylor**  
**PAST PRESIDENT**              **Luis F. Rodriguez**  
**BOARD**                              **Jessica Chapman, Gloria Dubner, Michael Garrett,**  
**W. Miller Goss, Jose M. Torrelles, Hisashi**  
**Hirabayashi, Chris Carilli, Richard Hills,**  
**Prajval Shastri**

**PARTICIPATING COMMISSIONS**

**Commission 40**                      **Radio Astronomy**

**DIVISION WORKING GROUPS**

**Interference Mitigation**  
**Astrophysically Important Spectral Lines**  
**Global VLBI**

**INTER DIVISION WORKING GROUPS**

**Division XII / Division X**                      **Historic Radio Astronomy**  
**Division IX / Division X**                      **Encouraging the International**  
**Development of Antarctic**  
**Astronomy**  
**Division IX / Division XI / Division X**      **Astronomy from the Moon**

**PROCEEDINGS BUSINESS SESSIONS on August 6, 2009 (Rio de Janeiro, Brazil)**

**1. Introduction**

The business meeting of Division X in the IAU 2009GA took place in three sessions during the day of August 6, 2009. The meeting, being well attended, started with the approval for the meeting agenda. Then the triennium reports were made in the first session by the president of Division X, Ren-Dong Nan, and by the chairs of three working groups: “Historic Radio Astronomy WG” by Wayne Orchiston, “Astrophysically Important Lines WG” by Masatoshi Ohishi, and “Global VLBI WG” by Tasso Tzioumis (proxy chair appointed by Steven Tingay). Afterwards, a dozen reports from observatories and worldwide significant projects have been presented in the second session. Business meeting of “Interference Mitigation WG” was located in the third session.

**2. Report of DX/COM40**

*2.1. Introduction of DX/COM40*

Division X focuses on radio Astronomy, which includes one Commission (COM40), three working groups, and three Inter-Division working groups. Division X counts with 941 individual members

till 2009GA from IAU website. And 131 new individual members (including 5 individual members from NCA countries) were approved by this GA. The total member now is 1073 (plus 1 from COM27) at the end of the General Assembly. Twelve Organizing Committee (OC) members including president and vice president were appointed by IAU for 2006-2009; twelve new OC members for 2009-2012 are recommended and have been approved by the EC86.

### 2.1.1. *Commission*

Some divisions like Division X and Division XI have only one commission, while others have more commissions, with the case of Division IV that has five commissions. The audience was explained that the discussion inside the Organizing Committee as well as broad radio community indicates a preference for keeping the present structure of commission setting, in the sense that Division X will not have more commissions and its Commission 40 will not merge into the other divisions.

### 2.1.2. *Working Groups*

The activities of working group were summarized and the agenda of business meetings of six working groups was listed in the business meeting of Division X. The ToRs (Terms of Reference) have been renewed by six working groups, and all agree to continue for the next triennium. At present, Division X includes three working groups: "Interference Mitigation WG", "Astrophysically Important Spectral Lines WG" and "Global VLBI WG", plus three Inter-Division working groups: "Historic Radio Astronomy WG", "Astronomy from the Moon WG", and "Encouraging the International Development of Antarctic Astronomy WG".

## 2.2. *On new OCs of DX/COM40 (2009-2012)*

EC asked Division Presidents to take advantage of email and internet to carry out the nomination of new president, vice-president and members of the Organizing Committee. Division X did it among Organizing Committees, working group chairs and some senior members, which has been agreed by the IAU General Secretary. The president explained the reasons of not involving all members in voting - incomplete email list, local server restrain and invalid voting-tool. As soon as these requirements are met, the new president may involve all members in the future voting process. The new members of the Organizing Committee were nominated and approved, with Russ Taylor as the next president and Jessica Chapman the next vice-president. It was also noted that the five older members of the Organizing Committee completed their three-year-due and were replaced.

Organizing Committee of 2009-2012 consists of Russ Taylor (President, Canada), Jessica Chapman (Vice-President, Australia), Gabriele Giovannini (Italy, new), Justin Jonas (South Africa, new), Joseph Lazio (USA, new), Monica Rubio (Chile, new), Raffaella Morganti (Netherlands, new), Chris Carilli (USA), Hisashi Hirabayashi (Japan), Prajval Shastri (India), Richard Hills (UK) and Ren-Dong Nan (Past President, China).

## 2.3. *Short review on the activities of 2006-2009*

Short review on the activities in Division X during the past triennium was presented in the business meeting. These included nominating new P, VP and OCs of Division X, proposing candidates to IAU-SNC, proposing candidate speakers for Invited Discourses in the GA, reviewing symposium proposals, coordinating donation and updating Division X webpage, etc. And the triennial report, the Transaction A of Division X (2006-2009) has been outlined at the meeting.

The activities of the Organizing Committee were briefed. It took a short while to explain how to meet the requests for the IAU Symposia to be supported. There was no symposium coordinated by DX/COM40 during this GA, which could be due to large amount of meetings on radio astronomy and its relevant R&Ds, such as ALMA and SKA, incomplete application materials of proposals, and the lack of contacts among division members.

The new OCs are expected to collaborate more closely to promote successful applications for organizing the IAU Symposia in the next triennium.

## 2.4. *Reports from observatories and projects*

The short reports on the recent developments of the radio observatories and projects have been presented in the 2nd session of the business meeting of Division X, e.g., SKATDP (world, Ken Kellermann), SRT (Italy, Gabriele Giovannini), ASKAP (Australia, Ray Norris), MeerKAT

(South Africa, Adrian Tiplady), FAST (China, Ren-Dong Nan), EVLA (US, Barry Clark), Arecibo ALFA (US, Murray Lewis), eMerlin (UK, Ian Morison), Global VLBI (JIVE/VLBA, Michael Garrett), LOFAR (NL/EU, Michael Garrett), CART (PrepSKA Activities in Canada, R. Taylor).

### 3. Presentations of the working groups

After the report of DX/COM40 by Ren-Dong Nan in the first session business meeting of Division X, three short presentations of working groups on the work over the last three years have been made respectively, by Wayne Orchiston (Historic Radio Astronomy), Masatoshi Ohishi (Astrophysically Important Lines) and Tasso Tzioumis (Global VLBI). Orchiston emphasized the importance of the preservation of historically significant radio telescopes and associated relics. Ohishi discussed the list of most important spectral lines for the radio bands from 0-275 GHz to 275-1000 GHz. Tasso stressed the cooperation between the ground-based observatories and Space VLBI missions.

### 4. Business meetings of the working groups

Four working groups (Historic Radio Astronomy WG, Astrophysically Important Spectral Lines WG, Global VLBI WG and Astronomy from the Moon WG) have had their distinct business meetings at the GA. And the business meeting of Interference Mitigation WG was located in the 3rd session of the business meeting of Division X.

As a prestigious radio astronomy prize, the Grote Reber Medal was issued to Dr. Barry Clark, the presentation of which was performed in the business meeting of Historic Radio Astronomy WG.

The Astrophysically Important Spectral Lines WG met on August 7 during the GA, and discussed the proposed updated list of spectral lines between 1,000 and 3,000 GHz. After the debate, the WG has achieved the agreement on the issue.

The business meeting of Global VLBI WG took place on August 7, 2009. Tasso Tzioumis acted as proxy for the new GVWG chair. The ToR of the WG was presented, discussed and refined.

The business meeting of Interference Mitigation WG was Chaired by Tasso Tzioumis. Michael Kesteven presented a technical report on "Current status of RFI mitigation in radio astronomy", which provided a brief summary of the nature and status of different techniques and explored the take-up issue.

### 5. Closing remarks

The president expressed that the IAU symposium coordinated in Division X should be promoted by the coming OC, and at least more activities on the radio astronomical sciences would be organized in the next General Assembly, held in Beijing in 2012.

Ren-Dong Nan  
*President of the Division*