

Minutes of the First Division III meeting

Friday, August 18, 11 am

The meeting was opened by Division President, Iwan Williams.

The minutes of the last meeting were accepted with a correction noting that in fact the Minor Planets Management Committee previously did *not* report to Division III, as originally incorrectly reported in the minutes.

A new memorandum of agreement (MOA) between the Smithsonian Astrophysical Institution (SAO) and the IAU for the Minor Planet Center (MPC) was announced. There is now a Minor Planet Committee, and Division III will have to elect Division III members to that committee. The Minor Planet Committee is a committee of Division III to advise and instruct the Minor Planet Center on its day to day operations, and as a way for the MPC to communicate with Division III, as outlined in the MOA.

Williams noted the Division's ongoing discussion over the last triennium about how to structure the commissions, the working groups, and the general functioning of the division. Under the present rules, commissions are appointed for six years, working groups for three years; they then cease to exist unless a case is made for their continuation. All of the recommendations of Division III for the organization of these working groups and commissions have been accepted by the Executive Committee (EC). Thus:

Commission 16 continues for another six years.

Commission 51 changes its name to "Bioastronomy" and continues for another six years.

Commission 15 and 20 are renewed for three years and are encouraged to discuss whether they should join as a single commission. The default is that they will combine as one commission after three years unless they make a strong case to the contrary.

Commission 21 and 22 likewise are renewed for three years and *strongly* encouraged to plan on merging as one commission by 2009.

The Working Group on Extrasolar Planets (WGESp) becomes a Commission on Extrasolar Planets. There is to be a meeting on Wednesday, August 23, to discuss the organizing of this commission and anyone interested in becoming a member of the commission is invited to attend.

The Working Group on Cartographic Coordinates and Rotational Elements (WGCCRE), which is a well-defined working group of Division I and III, was elevated to a commission by the EC at the recommendation of Division I. The reasons for this were not entirely clear, and there would be further discussion on this issue.

The Division III Working Group on Near Earth Asteroids (WGNEA) has become a working group of the EC on the Hazards of NEOs. Morrison continues as editor of NEO newsletter.

A discussion on whether a replacement working group on NEOs should be formed under Commissions 15 or 20 followed. Speakers noted a strong community interest in NEOs and the need for a focused group to advocate research and organize meetings on the topic of NEOs, independent of the need to discuss hazards, communicating with the press, and so forth (these roles now being the purview of the new EC Working Group). Williams noted that since Working Groups now must be renewed by the General Assembly, such a group would be better constituted as an Interest Group. This could be done within Commissions 15 or 20, or by the Division itself as is already done with a similar group for comets. Further discussion is left for the commissions in question.

Returning to the fates of the various Division Working Groups, Williams announced that the Working Group on Planetary System Nomenclature (WGPSN) fits well within the definition of a Working Group, and will continue. Likewise the Committee on Small Body Nomenclature (CSBN) continues as a Committee, which operates under the same rules as a working group.

There was a request from the Working Group on Natural Planetary Satellites (WGNPS), currently a WG of Commission 20, to become a joint WG of Division I and Division III. There was no dissent from Commission 20.

Williams noted the need for further streamlining of the Division: having the board of the division constituted of presidents and past presidents of the commissions and working groups fills up the canonical 12 places too quickly, leaving too little room for other members.

Reports on Working groups:

CSBN: (Tichá): 2511 minor planets, 674 comets, and 4 satellites of minor planets have been named in the past triennium. Special note was taken of the asteroids named for the crew of the lost Columbia shuttle, asteroids numbered from 51823 to 51829; the interesting solar system bodies Sedna and Apophis (the latter an NEO which will make a close approach to Earth in 2029); and Romulus and Remus, moons of asteroid Sylvia, making the first known triple asteroid. The 5th edition of The Dictionary of Minor Planet Names edited by Lutz Schmael, along with an addendum, has been published.

Spahr, Marsden, Fernández, and Williams discussed the issue of attribution for who suggested names for centaurs. Centaurs are named for centaurs in classical literature; there are very limited number of names (as with Trojans) and any on that list not yet used are appropriate. The attribution of the naming of a particular Centaur with a name from this list by an astrologer reflects the fact that anyone is allowed to propose from this list of names.

Working Group on Cartography Coordinates and Rotational Elements (Archinal): The change of status of this working group into a commission was without the knowledge or desire of the working group, which prefers to remain as a working group, as it has been since 1976. Furthermore, it is a joint working group of an organization external to IAU (Geodesy), a further complication. Williams will consult with the EC to see if this change was in fact done in error.

Changes are under consideration by the working group for the Sun, Moon, Mars, and Saturn, and significant advances have occurred in the coordinates of imaged asteroids and the newly discovered or imaged satellites. A final report should be completed by the end of the calendar year.

Working Group on Near Earth Asteroids (Morrison): its role as a Division working group is completed.

Working Group on Extrasolar Planets (Boss): The working group was narrowly defined to define and maintain a list of extrasolar planets. This has been done for the past six years, using the relatively strenuous criterion that the discovery must be published in a refereed journal. Approximately 170 such bodies have been confirmed so far, the majority (approximately 150) from radial velocity measurements on their stars but also including others discovered by pulsar timings, transits, and microlensing. Relatively small mass objects are beginning to be found, including a 5.5 Earth mass (with large uncertainty) being the smallest suggested. Thus the Pluto/planet definition issues may soon also impact Extrasolar Planet discussions. In addition, there are two possible planetary mass objects around brown dwarfs; one case is a possibly directly detected object, the other an object that has an uncertain mass (1 to 42 Jupiter masses) and thus the system could actually be a binary brown dwarf.

In response to questions, Boss noted that there is at least one possible binary planet (a 7 Jupiter mass object in orbit around a 14 Jupiter Mass object, which within errors might be planetary), and that in the future a consistent definition will be needed to classify such. It is also to be noted that several dozen stars are known to have more than one planet, with one having at least four planets.

Now that there is to be a commission on the study of extrasolar planets, it is expected that a subset of this commission, either a committee or subcommittee, will be needed to maintain this list. The new commission will organize this. In addition, the commission will need to work out how to coordinate its work with other commissions (such as Commission 51) and other Divisions of the IAU.

The nomenclature for such objects has been debated "to a standstill" with the competing suggestions either to use new unique names, or continue to use the binary star terminology with lower case letters given in order the planets are discovered. The latter becomes unwieldy when the star itself is not concisely named (which happens especially

with planets found during transit searches). There is no consensus. Pet names can be used to talk to the press but these do not have an official IAU designation.

Following these reports, the incoming President of the Division was elected. Following the general rule that the vice president becomes its president, Bowell was confirmed by acclamation as the next president of Division III.

Harris noted the upcoming definition of a planet might have implications for the organization of committees responsible for planet and minor planet nomenclature, and both the WGPSN and CSBN agreed to discuss different possibilities (including creating an umbrella committee, or having the CSBN be subordinated to the WGPSN) at their respective working group and committee meetings.

The division adjourned for lunch at 12:30 pm.

A second session of the Division for the specific discussion of the proposed definition of a planet, specifically for members of the Division, was held in the afternoon, beginning at 2:00 pm.

Along with a turnout of several hundred members, the President, President-elect, and designated future President Elect of the IAU itself also attended. Given their inherent historical interest, a transcript of that session (including a proposed alternate definition) is included in these minutes as an appendix. The session adjourned at 3:30 pm.

A third session opened at 4:00 pm, with a somewhat smaller attendance.

Given that Division III has a need to define priority concerning discoveries of small solar system objects, whose numbers are expected to increase dramatically within the next three years as the next generation of automated surveys come on line, Milani offered and explained a proposal to attempt to provide a fair way to reward those who not only discover these objects but provide sufficient follow-up observations to produce a reliable orbit, while allowing individuals outside the automated programs to be given credit (and naming priority).

The wide ranging discussion following this proposal covered the issues of the desirability for a certainly simplicity, the need to be able to deal with special cases, the encouragement of amateurs (especially comet discoverers), and the need to guard against those who might either prematurely announce discoveries in hopes that the ones guessed "right" given them naming criteria, or those who keep discoveries secret until

full orbits can be established, to prevent others from claiming rights but also preventing others from doing useful science on those objects.

In any event, a decision will be needed within the next six months, when the first of these new surveys (Pan-STARRS) is expected to come online. Either the CSBN and MPC, or a special committee within Commission 20 — however the incoming Division President chooses — will discuss the issue further, which will then go to the division board for approval [Ed.: The division president decided to start the process in Commission 20]. It is noted that, according to the new MOA with the MPC, the handling all such discoveries (including that of comets, previously in Division XII) is now a function of Division III.

Following this, Noll began a discussion of how the newly designated planets or dwarf planets are to be named. After significant discussion of the possibilities, Williams decreed that this should properly be held to the next meeting of the Division, on Tuesday, so that this discussion could be announced to the wider membership.

The meeting adjourned at 5:30 pm.

Tuesday, August 22:

Business meeting re-opened at 2:00 pm.

The division confirmed by acclamation the nomination of Karen Meech, the current president of Commission 61, as the incoming vice-president of the Division, to become president in three years' time.

By the IAU rules, Commission Presidents are appointed by Division. Following the recommendations of the Commissions, the following new Presidents were accepted without opposition:

Commission 15: Huebner

Commission 16: Courtin

Commission 20 Fernández

Commission 21: Witt

Commission 22: Spurný

Commission 51: Boss

Mayor was suggested as a president for the newly established commission on extrasolar planets, but this will need to be decided by the commission itself after it is organized.

Likewise, the following chairs of committees and working groups were approved:

WG on Coordinates and Rotation: Archinal becomes the new chair.

CBSN: Tichá continues as chair.

WGPSN: Schultz becomes the new chair.

Williams has written to the General Secretary, and will discuss at EC, the issue that Division III believes the WGCCRE was elevated to a commission in error; this will probably be reversed, and so it was dealt with here on that assumption that it is a working group.

Williams noted that, unlike Commissions, Working Groups have to have a well-defined task where collective memory is important, and so in WGs one is not so strict about rotating, but nonetheless one needs new membership.

The next Board of the Division III was then discussed. One issue is that the IAU rules used to say that such boards “normally” will have 8-12 members. However, Division III has seen the need to exceed 12 members, given the large number of commissions (whose presidents and immediate past presidents are ex officio members). Given in addition the regular officers (President, Vice President, and Secretary) that could already constitute 11 of the 12 allowed members, even without including past Division presidents or considering the need for discipline or geographical balance.

It was proposed (A'Hearn) to elect two people who have not held other major offices within the Division in the last three years, and the previous two outgoing presidents also to be elected. This would result in a board of 15 members.

Already elected were the President (Bowell) and vice president (Meech), the outgoing President (Williams). The secretary (Consolmagno) was reelected unopposed. The ex-officio members, as incoming presidents, are: Huebner, Courtin, Fernández, Witt, Spurný, Boss. The new incoming commission on Extrasolar Planets, yet to be determined, will also serve. (Note: this commission has subsequently been numbered as Commission 53 and Mayor has agreed to serve as its first president.) Of the outgoing commission presidents, only Gustafson and Valsecchi are additions to the board; the others are already on board by virtue of holding other offices, or have decline to serve.

Thus in fact, some free spots were available on the board. Nominations were solicited with an eye for both geographical and scientific balance. These included Watanabe, Marov, Schulz, and Levasseur-Regourd. Rather than choosing only two, Bowell asked that all four be accepted, as all four are needed for balance. The Division accepted without objection.

Thus the Division III organizing committee is:

Edward L. G. Bowell (USA, President)
Karen J. Meech (USA, Vice President)
Iwan P. Williams (UK, Outgoing President)
Guy Consolmagno (Vatican City State, Secretary)
W. F. Huebner (USA, C15 President)
Régis Courtin (France, C16 President)
Julio Fernández (Uruguay, C20 President)
Adolf N. Witt (USA, C21 President)
Pavel Spurný (Czech Republic, C22 President)
Alan P. Boss (USA, C51 President)
Michel Mayor (Switzerland, C53 President)
Bo Gustafson (USA, outgoing C21 President)
Giovanni B. Valsecchi (Italy, outgoing C20 President)
Anny-Chantal Levasseur-Regourd (France, additional)
Mikhail Ya. Marov (Russia, additional)
Rita Schulz (Germany, additional)
Jun-Ichi Watanabe (Japan, additional)

The commission vice-presidents and organizing committees are to be selected by the commissions themselves, and with confidence these names are accepted. Accepted by acclamation.

Reports from WGPSN and CSBN will be postponed until after the meeting of the WGPSN, at the Thursday Division III meeting. Likewise, Commission 16 and 20 are still to meet.

On the issue of reorganizing the naming working groups, an initial vote between discussing a change or continuing under the present system led to a vote of 19 in favor of no change, while only 16 voted to further discuss a change in some way to the present system. Thus the discussion did not continue. Considering the role that both naming groups will have in the naming of the yet-to-be-determined planetary objects, it was agreed that the two committees involved would discuss the matter among themselves. Their meetings, to follow on Wednesday, are open to all members, although voting will be only by the members of the working group or committee.

The meeting adjourned at 3:30 pm.

Thursday, August 24

The meeting re-opened at 11:00 am. The main purpose of this session was to wind up administrative items, including reports from WG and Commissions that had not previously reported or that had new items to report.

Williams noted that on August 23 the EC had accepted that the WG on Cartography and Rotational Elements should stay as a WG, and that the WG on Satellites should become a joint WG of Divisions I and III.

WGPSN (Aksnes): The WG held a workshop in Norway in September 2005 to revise its guidelines, as reported in IAU Transactions. With the exception of this face-to-face meeting, most of its business was normally done by e-mails.

There were 228 names of surface features approved during triennium, and 24 new satellite names. Formal approval of lists by the Division followed, by acclamation.

One proposal submitted to Division III is to remove the use of “provisional” names since this does not serve a useful purpose but merely creates extra work for those maintaining the name database. This was handled by revising the WGPSN Terms of Reference (ToR).

Among the changes to the ToR were minor but necessary changes from 2000 version: the title of the working group head changes from a “president” to a “chairperson” (appropriate for a WG of the Division rather than of the EC). It was noted that outside “consultants” are still needed for the WG to function. Though this class of membership is no longer recognized by the IAU, it was noted that since “consultant” no longer had an official IAU meaning the term could continue to be used in the ToR as a common descriptive term for these experts. It was also found that task groups of the WG in several cases needed up to seven members, rather than the six originally allowed. In section 4, the words “major and minor planets” becomes “planets”, and “comets” becomes “small solar system objects” in anticipation of likely changes in the definition of a planet by the General Assembly.

Concerning the issue of “provisional” names, it was proposed that section 4b would be revised to read: “Names will be made available quarterly in an official web site for public review. Any objections to these names based on significant substantive problems must be forwarded in writing or email to the Div III president within three months of the placing of these names on the website. Valid objections do not include personal preferences of the discoverers or other individuals.” The results of such appeals will be applied as before by the still-standing terms of section 4c.

It was noted that, given the uncertain status of the definition of a planet, references to dwarf planets, etc. would be premature. The WGPSN along with the CSBN recommend in the particular case of 2003 UB313, the discoverer will be solicited for an appropriate name, which will be given jointly to the CSBN and WGPSN for approval; the Division III board and then the EC will have the final say on any name. Bowell noted that this removes a level of bureaucracy and has more people look at it. There will be pressure to name it clearly; the hope is that a name can be approved within one month. The regular mechanism is still to be worked out. If Division III or the EC does not approve the proposed name, it will be returned to the committees for revision.

Williams noted that the inclusion of the Division III president and board, and the EC, by default assumes that some one will object to whatever name is proposed. In theory, if no one objected, it need not come to the EC. The issue of approaching the discoverer, rather than soliciting names from the public, was accepted unanimously by a vote of the Division.

CSBN (Tichá): New membership of the committee includes new members Bowell (ex-officio, Division III president), Schulz (ex-officio, WGPSN chair) and the addition of new members Syuichi Nakano and Keith Noll. In addition it was agreed to publish both names and citations of names of satellites of minor planets in the MPCs. The committee continues to search for the best way of limiting the naming process, and to concentrate on a smaller number of meaningful names/important bodies, rather than attempting to approve 100,000 new asteroid names. It is also searching for a way to provide a free website containing names and citations; this needs resolving copyright questions with the IAU and Springer, who publish the Dictionary of Minor Planet Names.

The Working Group, now Commission on Extra Solar Planets (Williams): There was a brief meeting lunchtime meeting to which 25 people showed up who were interested in joining the new commission. It was decided that Boss would be the one to receive e-mails for people who want to join, and that the old WG is to organize the new commission and select its first officers.

Commission 16: The question was raised if the physical study of Dwarf Planets come under Commission 15 or 16? Either 15 loses Ceres, or 16 loses Pluto. Williams notes that, in any event, the Division eventually will have to deal with the new situation, but that will depend on what passes at the General Assembly.

Commission 21: Progress is being made toward eventual combination with Commission 22; this will be discussed further at a scientific meeting on meteors to be held next year in Spain.

Commission 22 (Spurný) adopted a formal process for naming meteor showers, and defined a task group to define how individual showers are defined, to come up official names for the next triennium. The Division agreed to this proposal without dissent.

That ends the formal business meeting that had to be dealt with.

Under Other Business, the procedure for the upcoming vote on the definition of a planet at the General Assembly was discussed, and Williams agreed to present the concerns of the Division to the Executive Committee.

Finally, Bowell proposed two votes of thanks. One was to Williams for his stewardship during these tumultuous three years, noting that "this tumult is why I attend IAUs, I think it's a lot of fun. We've been described in bad terms because we're contentious but that's why we enjoy what we do."

The second person to thank was Brian Marsden who after 28 years at the MPC is to become director emeritus. He noted that Marsden had steered that organization amazingly; from a time when there were only 2000 numbered asteroids when to 134,000 now, an enormous task. He also noted that the catalog or orbits has gone from 3000 to 300000, and we may see a further increase by a factor of 100 in the next ten years

These votes of thanks were approved by acclamation.

The meeting finally adjourned at 12:30 pm.

Submitted, Guy Consolmagno, Secretary.