

General Incorporate Association: Division of Plasma Physics, Association of Asia-Pacific Physical Societies

一般社団法人アジア太平洋物理学会連合プラズマ物理分科会

FY2022 Business Report : 2022会計年度事業報告

1. Membership (会員)

DPP secretary Dr. Rui Ding reported country/regional distributions as of 2022.08.22 as follows.

プラズマ物理分科会事務局ルイディング氏による2022年8月22日付け会員の国/地域別分布は以下の通り。

| Country/Region 国/地域 | '19.6.4 | '21.6.23 | '22.8.22 | Country/Region 国/地域 | '19.6.4 | '21.6.23 | '22.8.22 | Country/Region 国/地域 | '19.6.4 | '21.6.23 | '22.8.22 |
|----------------------------|---------|----------|----------|-----------------------------|---------|----------|----------|-------------------------------|---------|----------|----------|
| 1. India (インド) | 782 | 1190 | 1189 | 17. Indonesia (インドネシア) | 8 | 5 | 5 | 33. Norway (ノルウェー) | - | - | 1 |
| 2. Beijing (北京) | 371 | 430 | 568 | 18. Iran (イラン) | 5 | 5 | 6 | 34. Spain (スペイン) | - | 1 | 2 |
| 3. Japan (日本) | 278 | 283 | 318 | 19. Vietnam (ベトナム) | 4 | 4 | 4 | 35. Switzerland (スイス) | 1 | 1 | 7 |
| 4. Korea (韓国) | 106 | 121 | 140 | 20. Singapore (シンガポール) | 4 | 5 | 5 | 36. New Zealand (ニュージーランド) | - | - | 5 |
| 5. US (米国) | 51 | 73 | 112 | 21. Russia (ロシア) | 2 | 5 | 9 | 37. Argentina (アルゼンチン) | - | - | 2 |
| 6. Australia (オーストラリア) | 45 | 49 | 54 | 22. Bangladesh (バングラデシュ) | 3 | 3 | 3 | 38. Hungary (ハンガリー) | - | - | 2 |
| 7. Taipei (台北) | 30 | 35 | 42 | 23. Belgium (ベルギー) | 2 | 9 | 14 | 39. Chile (チリ) | - | - | 2 |
| 8. Nepal (ネパール) | 26 | 30 | 29 | 24. Netherland (オランダ) | 3 | 3 | 2 | 40. Romania (ルーマニア) | - | - | 2 |
| 9. France (フランス) | 17 | 22 | 38 | 25. Lao PDR (ラオス) | 2 | 2 | 2 | 41. Sweden (スウェーデン) | - | - | 2 |
| 10. Thailand (タイ) | 18 | 18 | 20 | 26. Austria (オーストリア) | - | 2 | 3 | 42. Slovakia (スロバキア) | - | - | 1 |
| 11. Pakistan (パキスタン) | 13 | 12 | 16 | 27. Canada (カナダ) | 1 | 1 | 1 | 43. Saudi Arabia (サウジアラビア) | - | - | 1 |
| 12. Germany (ドイツ) | 10 | 13 | 30 | 28. Czech (チェコ) | 1 | 1 | 2 | 44. Portugal (ポルトガル) | - | - | 1 |
| 13. Malaysia (マレーシア) | 12 | 13 | 14 | 29. Egypt (エジプト) | 1 | 1 | 1 | 45. Brasil (ブラジル) | - | - | 1 |
| 14. UK (英国) | 9 | 12 | 24 | 30. Ireland (アイルランド) | 1 | 1 | 1 | 46. Colombia (コロンビア) | - | - | 1 |
| 15. Italy (イタリア) | 9 | 10 | 20 | 31. Israel (イスラエル) | 1 | 1 | 1 | | | | |
| 16. Philippines (フィリピン) | 10 | 13 | 9 | 32. Myanmar (ミャンマー) | 1 | 1 | 1 | Total (総数) | 1,825 | 2,371 | 2,713 |

To join AAPPS-DPP, one can submit form at <http://aappsdp.org/AAPPSDPPF/join.html>.所用のフォームを<http://aappsdp.org/AAPPSDPPF/join.html>に入力することで本学会会員になることができる。

2. DPP Homepage (本学会のホームページ)

DPP executive director Dr. H. Nagai continuously developing DPP homepages including annual conference pages.

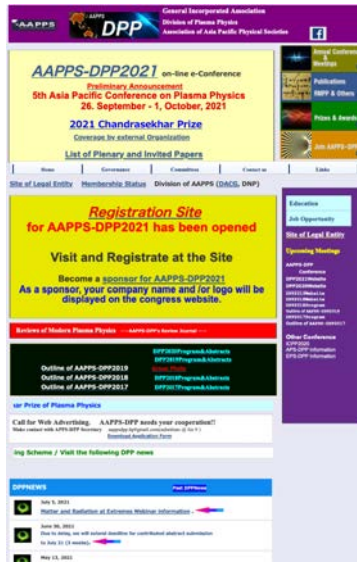
[<http://aappsdp.org/AAPPSDPPF/index.html>]

本学会永井業務執行理事が、年会ホームページを含む学会ホームページを継続的に整備していた。

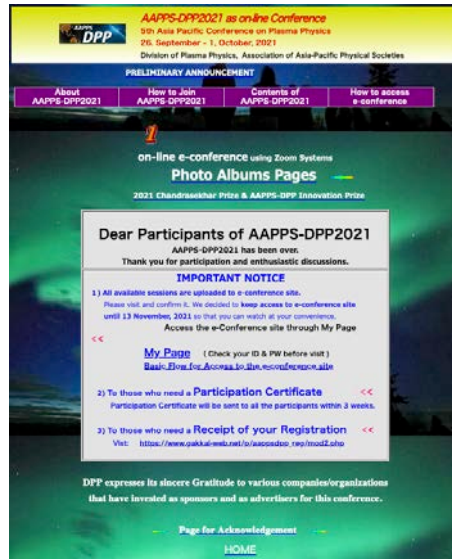
• Legal homepage of AAPPS-DPP Assoc. Inc. (法人ホームページ) : <http://aappsdp.org/DPPhoujin/index.html>.• Article of incorporation (定款) : <http://aappsdp.org/DPPhoujin/teikan.html>

DPP executive director Dr. H. Nagai retired from AAPPS-DPP after AAPPS-DPP2021. Mr Prashant Kumar (IPR) is now in charge of technical works of AAPPS-DPP home page at the request of CEO. Homepage is transferred to "SAKURA" server from Dr. Nagai's NetOwl server on January, 2022.

本学会永井業務執行理事はAAPPS-DPP2021年会終了後に退職した。それ以降は代表理事の指示の下、インドプラズマ研究所(IPR)のプラシャン・クマール氏が技術的な作業を行っている。また2022年1月にホームページは永井氏が使用していたネットウォールサーバーからサクラサーバーに移管した。



DPP Homepage
本学会ホームページ



AAPPS-DPP2021 conference Web. pages
AAPPS-DPP2021 年会ウェブ

3. Mailing services : 電子メール配信サービス

We use commercial mailing service system “Step Server” with annual fee of 14,160 JPY. DPP news such as conference information, job opportunities, Journal status, Announcements of DPP prizes are sent by CEO.

本学会では、年間使用料14,160円の商用電子メール配信サービスであるステップサーバーを用いて会議情報、人事公募情報、論文誌概況、本学会賞情報などの本学会ニュースは代表理事によって配信されている。

4. AAPPS-DPP2021 : 第五回年会

Division of plasma physics (DPP) annually holding Asia-Pacific conference on Plasma Physics. The fifth annual conference (AAPPS-DPP2021) was held as remote online e-conference using Zoom system from September 26-October 1, 2021. Figure 1 shows Opening session speakers of AAPPS-DPP2021.

プラズマ物理分科会は、毎年アジア太平洋プラズマ物理国際会議を行なっている。第五回年会(AAPPS-DPP2021)は2021年9月26-10月1日の日程でズームを用いたオンラインの電子国際会議として実施した。図1に開会式における講演者を示す。



Figure 1 Opening session speakers of AAPPS-DPP2021

Table 1 shows distribution of 649 presentations among plenary, topical plenary, invited, oral, and poster for various sub-disciplines. AAPPS-DPP2021 consists of 40 plenary talks, 51 topical plenary talks, 385 invited talks, 114 oral talks, and 59 poster presentations.

Cross-disciplinary session focused on Kinetic Alfvén Wave led by Yu Lin/F. Zonca/DJ Wu having 44 presentations.

Fundamental session is fundamental discipline common to all plasma physics area and had joint session with magnetic fusion plasma led by Patrick Diamond and Taik-Soo Hahn having 93 presentations.

Basic session discussed methods common to all plasma physics as well as small scale plasma research and dusty/quantum plasmas led by R. Ganesh having 67 presentations.

Applied session discussed applied plasma physics such as semi-conductor, medicine, agriculture, etc led by G. Uchida having 88 presentations.

Laser plasma session discussed Laser-plasma interaction, Laser fusion, wake-field acceleration led by Yutong Li having 67 presentations.

Space / Geomagnetism session discussed mostly space plasma physics and magnetic reconnection on space plasma led by T. Hada/A. Chian having 64 presentations.

Solar/Astro session discussed solar plasma physics and astro plasma physics led by R. Matsumoto having 62 presentations.

Magnetic Fusion session 1 (Core plasma) is led by H. Yamada having 96 presentations.

Magnetic Fusion session 2 (Edge plasma) is led by Ge Zhuang having 64 presentations.

Among them, 2021 S. Chandrasekhar lecture is given by Taik Soo Hahm and 2021 plasma innovation lecture is given by Anthony Murphy. We also celebrated 7 U40 winners and 6 U30 winners.

Table 1 Distribution of presentations

| | Plenary | Top. Pl | Invited | Oral | Poster | Total |
|--------------------|---------|---------|---------|------|--------|-------|
| Host | 1 | - | - | - | - | 1 |
| Chandra/PIP | 2 | - | - | - | - | 2 |
| Cross Disciplinary | 4 | 11 | 22 | 6 | 1 | 44 |
| Fundamental | 4 | 2 | 69 | 12 | 6 | 93 |
| Basic | 4 | 4 | 32 | 18 | 9 | 67 |
| Applied | 4 | 5 | 54 | 13 | 12 | 88 |
| Laser plasma | 4 | 11 | 39 | 8 | 5 | 67 |
| Space/Geomag | 4 | 5 | 40 | 12 | 3 | 64 |
| Solar/Astro | 4 | 4 | 35 | 16 | 3 | 62 |
| Magnetic Fusion1 | 4 | 5 | 60 | 15 | 12 | 96 |
| Magnetic Fusion2 | 4 | 4 | 34 | 14 | 8 | 64 |
| Closing | 1 | - | - | - | - | 1 |
| Total | 40 | 51 | 385 | 114 | 59 | 649 |

表1は、総数649の各分野の基調講演、分野基調講演、招待講演、口頭講演、およびポスター講演の分布を示している。AAPPS-DPP2021は、40の基調講演、51の分野基調講演、385の招待講演、114の口頭講演、59のポスター講演で構成した。

分野横断分野は、ユーリン/フルビオゾンカ/デジンウーを委員長として運動学的アルベン波をテーマとし44件の講演があった。

基盤分野は、パトリックダイヤモンドとタクサーハームを委員長としてプラズマ物理の共通の基礎原理を扱い磁場核融合との合同セッションを含め93件の講演があった。

基礎分野は、ラジャランガネッシュを委員長としてすべてのプラズマ物理学に共通する手法や小規模プラズマ研究およびダスト/量子プラズマを扱い67件の講演があった。

応用分野では、内田儀一郎委員長の下、半導体、医学、農学などの応用プラズマ物理について、88件の講演があった。

レーザープラズマ分野では、ユートンリー委員長の下、レーザープラズマ相互作用、レーザー核融合、航跡場加速について67件の講演があった。

宇宙空間地磁気分野では、羽田享/アブラハムチアン委員長の下、宇宙プラズマ物理と宇宙プラズマの磁気再結合を中心に64件の講演があった。太陽天文分野では、松元亮治委員長の下、太陽プラズマ物理学と天文プラズマ物理学について62件の講演があった。磁気核融合分野1(コアプラズマ)は、山田弘司委員長の下96件の講演があった。磁気核融合分野2(周辺プラズマ)は、ゲーツアン委員長の下64件件の講演があった。

これらの中で、2021年チャンドラセカール賞講演はタクサーハームによって、2021年プラズマイノベーション講演はアンソニーマーフィーによって行われた。また、U40の受賞者7名とU30の受賞者6名を祝った。

Table 2 shows distribution of region/countries and gender balance. This conference was 2nd e-conference held by AAPPS-DPP due to COVID-19 pandemic. Nonetheless, conference was great success to have 1109 participants all over the world. We have regional distribution of Japan(263), Beijing(206), India(151), USA (130), Korea(86), Germany(40), France(38), England(26), Italy(24), Belgium(23), Australia(22), Pakistan(19), Russia(13), Taipei(10), etc.

While participation from APS (130) and EPS(189) are significant, we had participants from South American countries, Argentina, Mexico, Chile, Peru, Columbia, and Brazil.

As for the gender balance, we had 184 female participants. Many female researchers joined from India, especially.

Table 2 Regional distribution of participants

| Region | No | Female | Speaker | Region | No | Female | Speaker |
|-------------|-----|--------|---------|--------------|------|--------|---------|
| Japan | 263 | 27 | 145 | Czech | 3 | 1 | 1 |
| Beijing | 206 | 32 | 138 | Canada | 2 | 0 | 2 |
| India | 151 | 45 | 76 | Philippines | 2 | 1 | 1 |
| USA | 130 | 20 | 86 | Swiss | 2 | 0 | 2 |
| Korea | 86 | 5 | 46 | Austria | 2 | 0 | 2 |
| Germany | 40 | 6 | 25 | Netherland | 2 | 1 | 1 |
| France* | 38 | 8 | 20 | Slovakia | 2 | 0 | 1 |
| England | 26 | 4 | 17 | Mexico | 2 | 0 | 1 |
| Italy | 24 | 2 | 11 | Saudi Arabia | 2 | 0 | 1 |
| Belgium | 23 | 6 | 13 | Chile | 1 | 0 | 1 |
| Australia | 22 | 7 | 13 | Lithuania | 1 | 1 | 1 |
| Pakistan | 19 | 8 | 7 | Peru | 1 | 0 | 1 |
| Russia | 13 | 2 | 7 | Singapore | 1 | 0 | 1 |
| Taipei | 10 | 2 | 7 | Sweden | 1 | 0 | 1 |
| Romania | 6 | 2 | 4 | Colombia | 1 | 0 | 1 |
| Malaysia | 5 | 2 | 2 | Portugal | 1 | 0 | 1 |
| Nepal | 5 | 0 | 3 | Slovenia | 1 | 0 | 0 |
| New Zealand | 4 | 0 | 2 | Brazil | 1 | 0 | 1 |
| Argentina | 3 | 1 | 2 | Hungary | 1 | 0 | 1 |
| Spain | 3 | 1 | 2 | Total | 1109 | 184 | 649 |
| Thailand | 3 | 0 | 2 | | | | |

* France include ITER organization

表 2 は、地域・国の分布とジェンダーバランスを示している。この会議は、COVID-19 パンデミックにより AAPPS-DPP が開催した第二回電子会議でした。世界中から 1109 名の参加者があり、会議は大成功であった。日本(263)、北京(206)、インド(151)、アメリカ(130)、韓国(86)、ドイツ(40)、フランス(38)、イギリス(26)、イタリア(24)、ベルギー(23)、オーストラリア(22)、パキスタン(19)、ロシア(13)、台北(10)など APS (130 名) と EPS (189 名) からの参加が多いのは重要であるが、南米諸国、アルゼンチン、メキシコ、チリ、ペルー、コロンビア、ブラジルからの参加者がいたことは特筆に値する。ジェンダーバランスでは、女性の参加者は 184 人でした。特にインドからは多くの女性研究者が参加した。

Regional Distribution of AAPPS-DPP2021 participants

2021. 09.26-2021.10.01 online conference: Total = 1,109



Figure 2 Distribution of participants of AAPPS-DPP 2021

2021 S. Chandrasekhar Prize: DPP select S. Chandrasekhar Prize annually to recognize outstanding contributions to plasma physics since 2014. Chandrasekhar prize selection committee chaired by Hiroshi Yamada selected 2021 laureate is Prof. Taik Soo Hahm (SNU). Medal is sponsored by IPR/PSSI.

2021 S. Chandrasekhar Prize: 本学会は、2014 年以来、プラズマ物理学への優れた貢献を表彰する S. チャンドラーセカール賞を毎年選出している。チャンドラーセカール賞選考委員会の議長は山田弘司（東大）が務め、タクサーハム教授（ソウル国立大学）を2021年の受賞者に選出した。メダルは IPR/PSSI が後援。



Figure 3 2021 Chandrasekhar prize certificate and Medal from IPR/PSSI

2021 Plasma Innovation Prize: Year 2021 is third year of “AAPPS-DPP Plasma Innovation Prize” to recognize outstanding contributions to experimental and / or theoretical research in all fields of plasma applications, focusing on impacts on industry. Plasma Innovation Prize selection committee chaired by W. Choe selected 2021 laureate is Dr.

Anthony Murphy (CSIRO) especially for his inventions such as world's first commercial plasma waste treatment process – PLASCON.

2021 プラズマ イノベーション賞: 2021 年は「AAPPS-DPP プラズマ イノベーション賞」の 3 年目であり、プラズマ アプリケーションのすべての分野における実験的および/または理論的研究で顕著な産業への影響を持つ貢献を表彰します。ウォンホチョエが議長を務めるプラズマ イノベーション賞選考委員会が 2021 年の受賞者を選出したのは、アンソニー マーフィー博士 (CSIRO) で特に世界初の商用プラズマ廃棄物処理プロセスである PLASCON などの発明に対して。

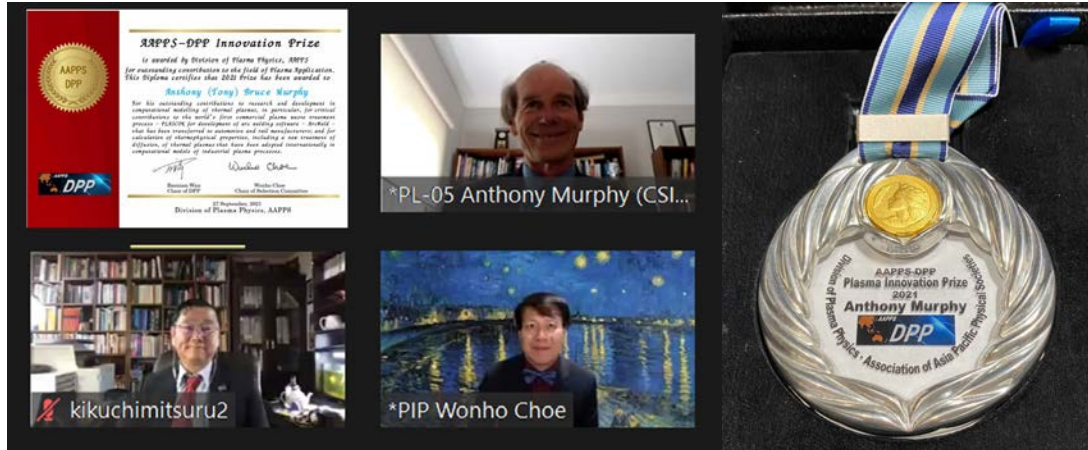


Fig.4 2021 Plasma Innovation prize certificate, laureate, CEO, selection com chair online photo and Medal

2021 Young Researcher (U40) Award: DPP is recognizing annually young talented plasma researchers not more than 40 years old since 2016 as AAPPS-DPP Young Research Award (U40). U40 selection committee chaired by TS Hahm selected 7 young talents; Hiroshi Tanabe (Fundamental, U. Tokyo), Min-Gu Yoo (Basic, PPPL), Sanghoo Park (Applied, KFE), Tong-Pu Yu (Laser, NUDT), Meng Zhou Space, Nanchang U.), Xin Cheng (Solar/Astro, Nanjing U.), Siye Ding (Magnetic Fusion, IPP-CAS) as U40 winners at DPP2021. Their citations can be seen at <http://aapsdpp.org/AAPPSDPPF/youngawardtable.html>. Winners received cash prize 500USD, plates and certificate. Photos of winners, a certificate and plate to Xin Cheng are shown in Fig.6.

2021 若手研究者(U40)賞: 本学会は、2016 年から毎年、40 歳以下の若く才能あるプラズマ研究者を AAPPS-DPP 若手研究者 (U40)賞として毎年表彰している。U40 選考委員会(委員長: タクスーハム教授)は、7 人の才能ある若手を選出した。田辺博士 (基盤、東京大学)、ミング ユー (基礎、PPPL)、サンフー パク (応用、韓国核融合研究院)、トン プー ユ (レーザー、NUDT)、メングツォウ (宇宙空間、南昌大学)、シンチェング (太陽/宇宙、南京大学)、シエディング (磁場核融合、中国科学院プラズマ物理研究所)。彼らの受賞理由は <http://aapsdpp.org/AAPPSDPPF/youngawardtable.html> にある。受賞者には賞金 500 米ドル、盾、賞状が贈られた。受賞者の写真、賞状、シンチェング への盾を図 6 に示す。



Hiroshi Tanabe Min-Gu Yoo Sanghoo Park Tong-Pu Yu

Meng Zhou Xin Cheng Siye Ding

Figure 6 2021 U40 awardees and plate (Xin Chen)

2021 U30 award: DPP is recognizing young talented doctoral scientists/ students not more than 30 years old since 2018 as AAPPS-DPP U30 Doctoral Scientist / Student Award. This award is sponsored by IFE-Forum. 2021 U30 award

selection committee chaired by K. Mima selected 2021 Winners; Riddhi Bandyopadhyay (Fundamental, Princeton U.), Kento Katagiri (Laser, Osaka U.), Honghong Wu (Space, Peking U.), Munehito Shoda (Solar/Asto, NAOJ), Guanqi Dong (Magnetic Fusion, SWIP), Sang Kyeun Kim (Magnetic Fusion, SNU) (Figure 7). Winners received cash prize 300USD, plate, and certificate. Their citation can be seen at <http://aappsdp.org/AAPPSDPPF/U30awardtable.html>

2021 U30 賞: 本学会は、2018 年から 30 歳以下の才能ある博士課程の科学者/学生を AAPPS-DPP U30 博士科学者/学生賞として表彰している。この賞は、IFE-Forum が後援している。2021 年 U30 賞選考委員会 (委員長: 三間國興) が 2021 年受賞者を選出。リディバンドオパデヤイ(基盤, プリンストン大学), 片桐 健登 (レーザー, 大阪大学), 吳紅紅 (宇宙空間, 北京大學), 庄田宗人(太陽/宇宙, 国立天文台), 董冠岐(磁場核融合, 西南物理研究院), サンギョクキム(磁場核融合, ソウル国立大学) (図 7)。優勝者には、賞金 300 米ドル、盾、賞状が贈られた。彼らの受賞理由は <http://aappsdp.org/AAPPSDPPF/U30awardtable.html> にある。



Figure 7 2021 AAPPS-DPP U30 Awardees and certificate (Riddhi Bandyopadhyay)

2021 Poster Prize: DPP is recognizing significant poster presentation at the annual conference as AAPPS-DPP Poster Prize since 2018 for both students and young/senior researchers. Among 59 poster presentations, 9 posters (Shrish Raj, Swati Dahiya, Kalyani Barman, Masato Sumino, Tatiana Pikuz, Feng-Jen Chang, Feiyue Mao, Min Sang Cho, Yin Liu) were selected by the selection committee chaired by Abhijit Sen. Winners will receive certificate and a Springer book on plasma physics. The poster session has been done for full week and large number of participants visited poster Web site during the conference. Number of posters are smaller while we encouraging more discussion in poster session. <http://aappsdp.org/AAPPSDPPF/posteraward.html>.

2021 年ポスター賞: 本学会は、2018 年から学生と若手/上級研究者の両方を対象として年会での重要なポスター発表を、AAPPS-DPP ポスター賞として認めている。59 のポスター発表の中から、9 点のポスター (シリシラジ、スワティ、カルヤニバルマン、角野正人、タチアナピツク、フェンジェンチャング、フェイユマオ、ミンサンチョー、インリウ) が、選考委員会 (アブジットセン委員長) によって選ばれた。賞状とプラズマ物理学に関するスプリングーの書籍を授与した。ポスターセッションは 1 週間にわたって行われ、会議中に多数の参加者がポスター Web サイトを訪れました。ポスターセッションでより多くの議論を奨励する一方で、ポスター数は少数に止まった。 <http://aappsdp.org/AAPPSDPPF/posteraward.html>

Some of Zoom conference presentation views are shown in Fig. 8.

Zoom 会議の発表の一部を図 8 に示す。

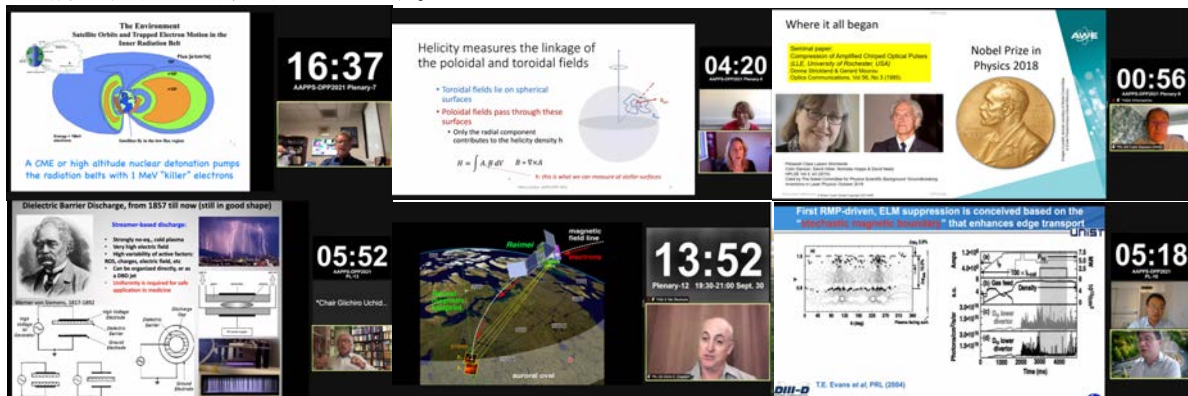


Fig.8 PL-19:W. Gekelman, PL-23:M. Jardine, PL-24:C. Danson, PL-34:A. Fridman, PL-32:C. Chaston, PL-25: YK In

5. Preparation of AAPPS-DPP2022 (AAPPS-DPP2022 の準備)

The fifth annual conference (AAPPS-DPP2022) will be held during Oct 9-Oct 14, 2022 as online e-conference same as AAPPS-DPP2021 due to COVID-19. Tentative regional distribution world-wide of presenters are shown in Fig.8. Due to ~100 participation to APPC-15, we have slight reduction in total presentation. Nomination of 2022 S. Chandrasekhar Prize, Plasma Innovation Prize, U40 and U30 award and establishment of selection committees has been done. Press releases are to be made in September.

COVID-19 の影響により、第 5 回年次大会 (AAPPS-DPP2022) は、2022 年 10 月 9 日～10 月 14 日に、AAPPS-DPP2021 と同様にオンライン電子会議として開催する。世界のプレゼンターの暫定的な地域分布を図 8 に示す。APPC-15 に約 100 人が参加したため、全体のプレゼンテーションがわずかに減少した。2022 年 S. チャンドラセカール賞、プラズマイノベーション賞、U40、U30 賞のノミネートと選考委員会を設置した。プレスリリースは 9 月に行う予定。

Regional distribution of Presenters (Plenary, Topical Plenary, Invited, Oral, Poster) for AAPPS-DPP2022

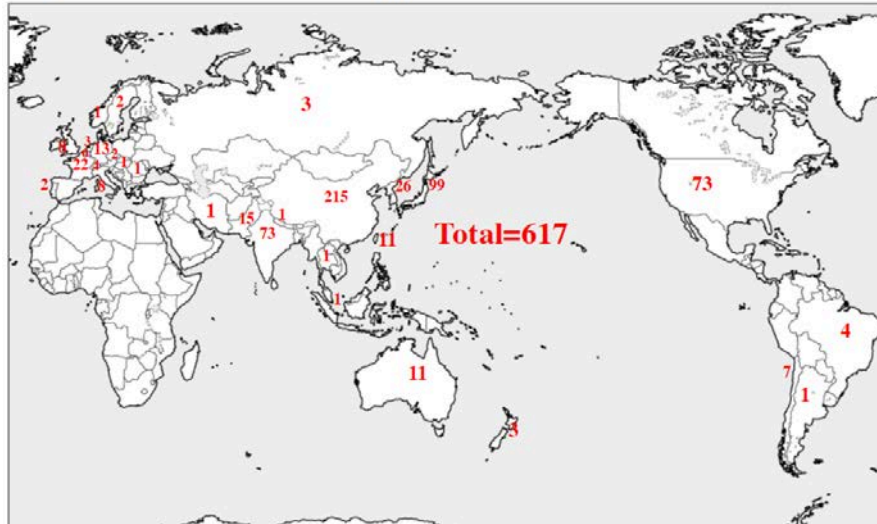


Figure 8 World distribution of Plenary, Topical Plenary, Invited, Oral, Poster presenters

6. Reviews of Modern Plasma Physics (RMPP) : レビューオブモダンフィジックス

RMPP is review journal specialized to plasma physics. The first volume (2017) published 10 articles. The second volume (2018) published 9 articles and third volume (2019) published 15 articles, 4th volume (2020) published 12 articles, 5th volume published 13 articles. While we still need to some time to get IF (impact factor), exaly.com provides useful information at <https://exaly.com/journal/40760/reviews-of-modern-plasma-physics>. In 2022, as of Sept. 12, 63 papers are submitted among which 32 papers are accepted, of which 27 papers are published on line.

RMPPは本学会が運営しシュプリンガー・ネージャー社から出版しているプラズマ物理に特化したレビュー論文誌である。第 1 巻(2017年)は10論文を出版した。第 2 巻(2018年)は 9 論文、第 3 巻は 1 5 論文、第 4 巻は 1 2 論文、第 5 巻は 13 論文を出版した。IF (インパクト ファクター) を取得するにはまだ時間が必要であるが、exaly.com は <https://exaly.com/journal/40760/reviews-of-modern-plasma-physics> で有用な情報を提供している。2022 年 9 月 12 日現在、63 件の論文が投稿され、そのうち 32 件の論文が採択され、そのうち 27 件の論文がオンラインで公開されている。

Reviews of Modern Plasma Physics

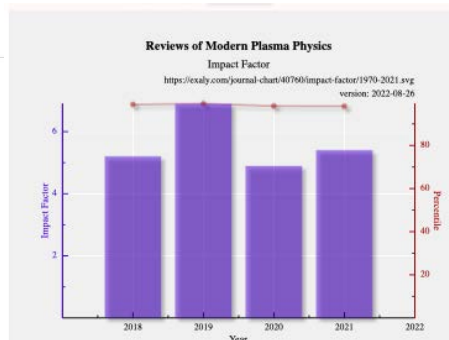
Physics, Plasma Physics

Top Authors Who Cited? Where Cited?

| | | |
|----------------------------------|------------------------------|----------------------------|
| (top 2%) 5.4 Impact Factor | (top 2%) 6 extended IF | (top 25%) 17 H-Index |
| 64 authors | 69 papers | 808 citations |
| 169 citing journals | 1,329 citing authors | |

Main Disciplines of This Journal

| Discipline | Rank | Avg. IF | Articles |
|-------------------|--|---------|------------|
| Plasma Physics | 1 st (of 14 journals) | 1.6 | 26,331 |
| Physics | 114 th (of 2,076 journals) | 2.2 | 9,167,597 |
| Physical Sciences | 603 rd (of 12,155 journals) | 1.9 | 28,166,260 |



The graph shows the changes in the impact factor of **Reviews of Modern Plasma Physics** and its the corresponding percentile for the sake of comparison with the entire literature. Impact Factor is the most common scientometric index, which is defined by the number of citations of papers in two preceding years divided by the number of papers published in those years.

Most Cited Articles of Reviews of Modern Plasma Physics

| Title | Year | Citations |
|---|------|-----------|
| Coherent emission mechanisms in astrophysical plasmas | 2017 | 105 |
| Helicon-type radiofrequency plasma thrusters and magnetic plasma nozzles | 2019 | 71 |
| The interaction of ultra-low-frequency pc3-5 waves with charged particles in Earth's magnetosphere | 2017 | 71 |
| State of the art in medical applications using non-thermal atmospheric pressure plasma | 2017 | 56 |
| Kinetic instabilities in the solar wind driven by temperature anisotropies | 2017 | 46 |
| Recent progress in research and development of hollow cathodes for electric propulsion | 2019 | 38 |
| Above the weak nonlinearity: super-nonlinear waves in astrophysical and laboratory plasmas | 2018 | 31 |
| Magnetohydrodynamic and kinetic scale turbulence in the near-Earth space plasmas: a (short) biased review | 2020 | 30 |
| Introduction to the interaction between energetic particles and Alfvén eigenmodes in toroidal plasmas | 2019 | 29 |
| The magnetic Rayleigh-Taylor instability in solar prominences | 2018 | 27 |
| Recent progress in fast-ion diagnostics for magnetically confined plasmas | 2018 | 27 |
| A review of the characterization and optimization of ablative pulsed plasma thrusters | 2019 | 25 |
| Radiation reaction in electron-beam interactions with high-intensity lasers | 2020 | 24 |
| Nanocarbon materials fabricated using plasmas | 2017 | 24 |
| Latest progress in Hall thrusters plasma modelling | 2019 | 22 |
| Towards universal plasma-enabled platform for the advanced nanofabrication: plasma physics level approach | 2018 | 20 |
| Nonlinear laser-plasma interactions | 2017 | 17 |
| Direct current arc plasma thrusters for space applications: basic physics, design and perspectives | 2019 | 13 |
| Modern gyrokinetic formulation of collisional and turbulent transport in toroidally rotating plasmas | 2017 | 13 |
| Wakefield acceleration | 2020 | 11 |
| Basic microscopic plasma physics from N-body mechanics | 2018 | 11 |
| Numerical modeling of high efficiency multistage plasma thrusters for space applications | 2019 | 10 |
| Phase-space modeling of solid-state plasmas | 2019 | 9 |
| Shocks in collisionless plasmas | 2017 | 9 |
| Plasma-digital nexus: plasma nanotechnology for the digital manufacturing age | 2020 | 8 |

Schools

| School | Institution | Articles | Citations | A Rank | C Rank |
|--|---|----------|-----------|--------|--------|
| School of Physics | Peking University | 2 | 82 | 255 | 255 |
| School of Physics | University of Sydney | 2 | 109 | 255 | 242 |
| School of Astronomy and Space Science | Nanjing University | 2 | 6 | 36 | 56 |
| School of Astronomy and Space Science | Nanjing University | 2 | 6 | 69 | 102 |
| Graduate School of Engineering | Tohoku University | 2 | 95 | 255 | 255 |
| Department of Geophysics and Planetary Science | University of Science and Technology of China | 2 | 1 | 25 | 61 |
| Department of Physics | Umeå University | 2 | 2 | 184 | 255 |
| Physics and Mechanical Engineering | Queensland University of Technology | 2 | 28 | 200 | 255 |
| Physics and Mechanical Engineering | Queensland University of Technology | 2 | 28 | 255 | 255 |
| Physics and Mechanical Engineering | Queensland University of Technology | 2 | 28 | 255 | 255 |
| Department of Physics | Jahangirnagar University | 2 | | 40 | 132 |
| State Key Laboratory of Nuclear Physics and Technology | Peking University | 1 | 11 | 164 | 177 |
| School of Aerospace Engineering | Beijing Institute of Technology | 1 | 25 | 196 | 116 |
| School of Chemistry and Chemical Engineering | Beijing Institute of Technology | 1 | 25 | 255 | 255 |
| Department of Physics | Government College University | 1 | | 110 | 204 |
| Institute of Physics | University of Greifswald | 1 | 10 | 44 | 71 |
| Faculty of Mathematics | University of Vienna | 1 | | 255 | 255 |
| Department of Physics | University of California | 1 | 11 | 255 | 255 |
| Department of Physics and Astronomy | University of California | 1 | 11 | 255 | 255 |
| Department of Physics and Astronomy | Uppsala University | 1 | 9 | 255 | 255 |

A Rank refers to the ranking of **Reviews of Modern Plasma Physics** in the given institution according to the number of articles, and C Rank according to the number of citations.

Current complete and waiting list 2022.09.12

| # | 1 st Author | Title | Submission | Current status | Paper # |
|----|----------------------------|--|------------|----------------------|------------------|
| 1 | Golan M. Hozain [QP2] | The methods of thermal field theory for degenerate quantum plasmas in astrophysical compact objects [SI QP] | 2021.10.11 | Published 2022.01.13 | RMPP (2022) 6:1 |
| 2 | Katsumi Iida [F] | Non-local transport nature revealed by the research in transient phenomena of toroidal plasma [Review Paper] | 2021.08.09 | Published 2022.01.27 | RMPP (2022) 6:2 |
| 3 | Abdul Mannan [QP3] | Theory for linear and nonlinear nucleus-acoustic waves in warm degenerate quantum plasmas [SI QP] | 2021.11.08 | Accepted 2022.01.19 | RMPP (2022) 6:3 |
| 4 | Gert Brodin [QP4] | Relativistic and non-relativistic quantum kinetic theory of plasmas [SI QP] | 2021.11.03 | Accepted 2022.01.19 | RMPP (2022) 6:4 |
| 5 | Anam P. Mishra [QP5] | Wave-particle interactions in quantum plasmas [SI QP] | 2021.11.03 | Accepted 2022.01.07 | RMPP (2022) 6:5 |
| 6 | Sharmistha Ghosh [QP6] | Review of heavy-nucleus-acoustic nonlinear structures in cold degenerate quantum plasmas [SI QP] | 2021.11.15 | Accepted 2022.02.04 | RMPP (2022) 6:6 |
| 7 | Fernando Haas [QP7] | Plasmas with arbitrary degree of degeneracy [SI QP] | 2021.12.02 | Accepted 2022.02.18 | RMPP (2022) 6:7 |
| 8 | Fang Shen [SA] | Propagation, Deflection and Interaction of CMEs in the Corona and Heliosphere [Review Paper from DPP2020] | 2021.07.29 | Accepted 2022.02.23 | RMPP (2022) 6:8 |
| 9 | K. Ahmad [MF non-invited] | Recent progress, Liquid metal use as plasma facing component and vapor shielding of high heat flux | 2021.12.29 | Accepted 2022.03.15 | RMPP (2022) 6:9 |
| 10 | PabloRodriguezFernandez[F] | On the local nature of cold-pulse experiments [Review Paper from DPP2020] | 2021.09.29 | Accepted 2022.04.06 | RMPP (2022) 6:10 |
| 11 | Waqar Masood [QP8] | Trapping in quantum plasmas [SI QP] | 2021.11.10 | Accepted 2022.04.16 | RMPP (2022) 6:11 |
| 12 | Linghua Wang [SG] | Suprathermal electrons observed by ED-IES in the Earth's cusp and lobe [review U40] | 2022.01.25 | Accepted 2022.04.26 | RMPP (2022) 6:12 |
| 13 | Keigo Takeda [A] | Wide range applications of proton plasma diagnostics using vacuum ultraviolet absorption spectroscopy [Special Topics, U40] | 2022.02.01 | Accepted 2022.05.30 | RMPP (2022) 6:13 |
| 14 | Zheng-Xiong Wang [MF] | Nonlinear evolution and control of neo-classical tearing mode in reversed magnetic shear tokamak plasmas [Special Topics, U40] | 2021.09.13 | Accepted 2022.05.28 | RMPP (2022) 6:14 |
| 15 | Meng Zhou [U40F] | Kinetic Properties of Collisionless Magnetic Reconnection in Space Plasma: In situ Observations (U40) | 2022.04.02 | Accepted 2022.06.19 | RMPP (2022) 6:15 |
| 16 | Sudheep Bhattacharjee [B] | Physics of plasmas confined by a dipole magnet: insights from compact experiments driven at steady state [Review Paper from DPP2020] | 2022.01.04 | Accepted 2022.06.16 | RMPP (2022) 6:16 |
| 17 | Pankaj Arni [BA#9] | Treatment of organic wastewater by a combination of non-thermal plasma and catalyst: A review (A-O9) | 2022.03.20 | Accepted 2022.06.14 | RMPP (2022) 6:17 |
| 18 | Hyeon Park (Cassidy Lee) | Advances in Physics of the Magnetohydro-Dynamic and Turbulence based Instabilities in Toroidal Plasmas via 2-D/3-D Visualization | 2021.10.03 | Accepted 2022.06.05 | RMPP (2022) 6:18 |
| 19 | Simsu Liu (AS-PL4) | The origin of plastic cosmic rays | 2022.04.04 | Accepted 2022.07.11 | RMPP (2022) 6:19 |
| 20 | S. Krishnamoorti [DP#3] | Dust and powder in fusion plasmas: Recent developments in theory, modeling, and experiments [SDusty plasma] | 2022.04.04 | Accepted 2022.06.26 | RMPP (2022) 6:20 |
| 21 | Akanishi Goya [BA#3] | Molecular and hydrodynamic descriptions of shear flows in two-dimensional strongly coupled dusty plasmas | 2022.04.18 | Accepted 2022.07.13 | RMPP (2022) 6:21 |
| 22 | Yashiro Naruya [ST#7] | Low-frequency Alfvén waves and parametric instabilities in fluid and kinetic plasmas [Tutorial] | 2022.05.03 | Accepted 2022.08.03 | RMPP (2022) 6:22 |
| 23 | Chenyang Du [DP#4] | Structure and dynamics of binary complex plasmas [Special Topics] | 2022.05.04 | Accepted 2022.07.20 | RMPP (2022) 6:23 |
| 24 | Hajime Urasaki [MF#6] | Development of plasma control schemes and plan of plasma physics studies in JT-60SA [Special Topics] | 2022.04.15 | Accepted 2022.08.10 | RMPP (2022) 6:24 |
| 25 | A. Malhotra [MF#13] | Study of Alfvén Eigenmodes with Heavy Ion Beam Probing in the T-II stellarator | 2022.04.04 | Accepted 2022.08.13 | RMPP (2022) 6:25 |
| 26 | Nagshao Wang [MF#9] | A brief review on the interaction between resonant magnetic perturbation and tearing mode in J-TEXT [Special Topics] | 2022.05.04 | Accepted 2022.08.16 | RMPP (2022) 6:26 |
| 27 | Qiang Chen [BA#7] | The Barrier Coating Deposition In Plasmas (PL-31) | 2022.04.09 | Accepted 2022.08.08 | RMPP (2022) 6:27 |
| 28 | Masaru Hori [DP#11] | Radical Controlled Plasma Processes – Basic Researches and Innovations- [Plasma Innovation lecture2020] | 2022.04.11 | Accepted 2022.07.23 | RMPP-D-22-00023 |
| 29 | Uwe Czarnetzki [A] | Local and non-local electron heating in low-pressure plasmas [Review Paper from DPP2020] | 2022.06.04 | Accepted 2022.08.04 | RMPP-D-22-00048 |
| 30 | Hae June Lee [A] | Two-dimensional particle-in-cell simulation parallelized with graphics processing units for the investigation of plasma kinetics in a dual-frequency capacitively coupled plasma [DPP2020] | 2022.05.10 | Accepted 2022.09.07 | RMPP-D-22-00036 |
| 31 | Abhinav Sen [DP#] | Nonlinear dust acoustic waves (including solitons, shocks etc) [SDusty plasma] | 2022.06.03 | Accepted 2022.09.07 | RMPP-D-22-00046 |
| 32 | Takanobu Amano [SA] | Nonthermal Electron Acceleration at Collisionless Quasi-perpendicular Shocks [Special Topics, U40] | 2022.02.28 | Accepted 2022.09.07 | RMPP-D-22-00011 |