

EMA 2023 survey

In the beginning of 2023, the European Magnetism Association (EMA) conducted an online survey, addressing different key topics from outreach activities to EMA events. All colleagues interested in the field of Magnetism were invited to participate, helping us to define the roadmap for the coming years and shape the future of EMA. The survey gave the opportunity to give input and share expectations, as well as visions concerning EMA. All answers have been gathered anonymously¹.

In this document, we summarize the answers and outline the actions that EMA has taken – or considers taking – concerning the different aspect. In particular, the board of EMA has decided to develop a strategy for the following items:

- 1) Improve the link with young scientists and involve them in the decision making of EMA.
- 2) Individual and group membership
- 3) Links with national societies and communities in Europe
- 4) Publishing, especially proceedings

Item 1 is currently being developed in the board of EMA. Items 2 to 4 are discussed in three dedicated commissions, involving members of the General Council (GC). A strategy for all four items will be proposed for approval at the next meeting of the GC of EMA, which will take place during JEMS (27^{th} Aug -1^{st} Sep 2023 in Madrid, Spain).

¹ We acknowledge the contribution of Lalit Mohan KANDPAL to the analysis of the results and production of this report



Table of contents (Questions asked in the survey)

1. What is your career stage	3
2. How/where did you first hear about EMA?	4
3. How often do you visit EMA's website or social media?	5
4. How often do you read EMA-related posts on social media?	5
5. Which of EMA's media content(s) is/are the most useful for you?	5
6. Which of EMA's communication means are the most relevant for you?	6
7. Which other content or way of communication would be good to have and what could be improved?	6
8. Do you currently feel like a member of EMA, and from which benefit?	7
9. What could EMA do to strengthen the connection with the magnetism community so that its members feel part of supportive network?	8
10. How do you think EMA could increase its visibility and attract new members?	9
11. Would you like to become active as a member in EMA, take up volunteer duties, or help us to support the community for actions such as:	
12. Overall, how clear are EMA's goals to you and its position among other national, European, and international magnetism-related societies?	
13. Please indicate up to three possible future actions you would like EMA to implement	14
14. What is your opinion concerning the hybrid format and what experiences/thoughts would you	
15. If you attended either JEMS or ESM in virtual rather than in-person format, what was your reason for doing so?	16
16. If you can't attend a future JEMS in person for whatever reason, how likely are you to attend online?	17
17. Which practical actions do you feel should be implemented to minimize the carbon footprint EMA events?	
18. Should JEMS have proceedings?	18
19. Have you ever attended an EMA Plenary e-Lecture or early career e-seminar?	19
20. Do you think that the EMA Plenary e-Lecture or early career e-seminar are useful, e.g., for ensuring a broad visibility of the members work and/or for networking?	20



1. What is your career stage

ANALYSIS



EMA COMMENTS

The contributions are spread rather evenly in terms of age. However, considering that the ratio of PhD candidates working in Magnetism is larger than 15%, we feel that they are underrepresented in the survey.

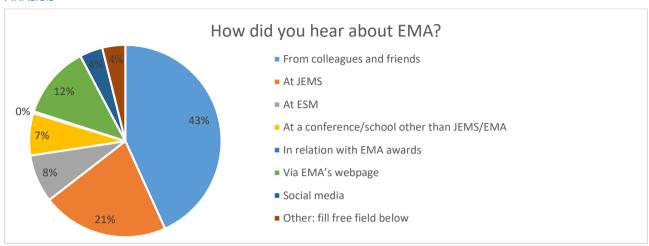


How to better connect with young scientists and involve them in EMA and the European magnetism community is one actions being developed by the board of EMA.



2. How/where did you first hear about EMA?

ANALYSIS



OTHER ANSWERS

PhD supervisors; Don't remember; UK Magnetics Society; Asked to lecture at EMA organized school; I cannot remember; I don't remember; From Olivier Fruchart; Founding member; Through E-mail advertisement; EMA emails; Through AlMagn, the Italian Magnetism Association; I can't remember

EMA COMMENTS

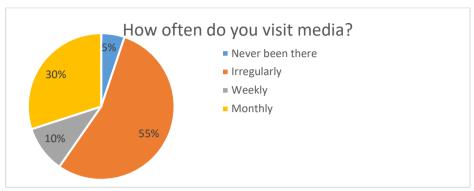
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We feel that the outcome highlights the crucial aspect of networking, because > 75% mentioned that they heard about EMA from colleagues or during events.



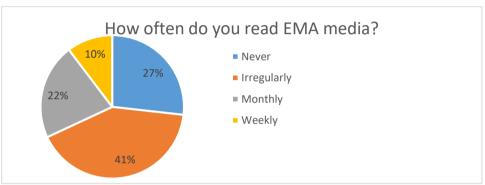
3. How often do you visit EMA's website or social media?

ANALYSIS



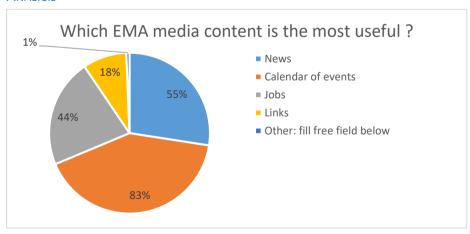
4. How often do you read EMA-related posts on social media?

ANALYSIS



5. Which of EMA's media content(s) is/are the most useful for you?

ANALYSIS



OTHER ANSWERS:

ESM Repository; Talks; eMails

EMA COMMENTS (ITEM 3 - 5)

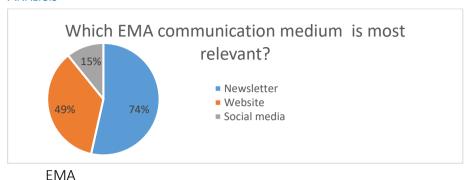
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The responses reflect the importance of clear and comprehensive communication as we do not reach all members on a regular basis and many colleagues are reached only infrequently.



6. Which of EMA's communication means are the most relevant for you?

ANALYSIS



7. Which other content or way of communication would be good to have and what could be improved?

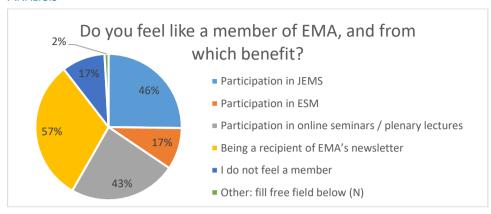
Here are the main categories of suggestions

- Recall the availability of ESM repository and Calendar of events for all magnetism-related events
- This is done at ESM and will be mentioned during JEMS.
- Make an index for our newsletter
- → We will consider this.
- Having event or actions more related/focused on application/industry
- Diana Leitao has recently been appointed as new Officer for Industry relations. She comes full of excellent ideas and energy, and we are looking forward benefiting from her first actions.
- Live meetings or Forum on specific topics to foster smaller community
- Currently, EMA focuses its capacities on larger events such as ESM and JEMS. However, in the process of involving more community members, we are open to discuss possible options with volunteers who would like to drive such actions.
- Calendar of application deadline / have more information about grants and funding
- We agree that a section like this would be excellent, but EMA currently does not have the capacity to maintain such an extended and detailed overview, but we do our best to announce magnetism-relevant conferences and advertise successful proposal at the European Level.
- Having information about bibliography: paper of the week or most cited paper
- In order to highlight excellence in magnetism-related research, EMA announces award winners and also has its own awards; furthermore, larger successful proposal at the European level are advertised. We currently do not have the capacity to expand our activities towards adequate publication-related actions that would serve the larger community, but we are open to discuss possible ideas.
- Use other social media (Instagram, WhatsApp, Facebook, YouTube, mobile application)
- We will explore this option in the context of the "Young EMA Officers" initiative, which is to be launched soon.
- Advertise EMA in other journals/webpage
- EMA has a policy to develop links with other organizations, which we hope can contribute to enhance our visibility.



8. Do you currently feel like a member of EMA, and from which benefit?

ANALYSIS



EMA COMMENTS:

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This confirms our vision regarding the two current main actions of EMA:

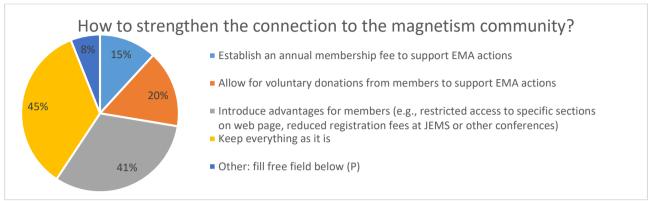
(1) promoting selected major events (e.g., ESM and JEMS) and

(2) facilitate communication for the benefit of all.



9. What could EMA do to strengthen the connection with the magnetism community so that its members feel part of supportive network?

ANALYSIS



(Additional suggestions given via the free-field option are not listed here, but can be provided upon request.)

EMA COMMENTS



Discussions in the board of EMA revealed a largely shared vision, which is that we should provide the same benefit to all colleagues in Europe irrespective of being a member or not. Allowing an annual voluntary donation may be an option to keep this as is while addressing the financial model of EMA. "Membership" is one of the three core topics for which dedicated EMA commissions will develop a strategy this spring.



10. How do you think EMA could increase its visibility and attract new members?

SELECTED ANSWERS

- Extend the network to the countries outside Europe, especially LatinAmerican countries
- Collaboration with student organisations, such as physics students, since these are the ones that will be future researchers and industry professionals.
- Support individual conferences or workshops (similar to the IEEE conferences)
 - "- resort to national associations
 - having a formal membership with benefits
 - inviting all to contribute as in the survey
 - engage with the next generation- provide opportunities for ECR to contribute to the content of actions, or to help devise them. M"
- Still in the idea of strengthening the bonds between academia and industry, it would be interesting to showcase projects in development that were possible thanks to the connection EMA helped establish.
- "Connect with associations such as the European Physical Society Opening a sort of section for young scientists (e.g. like EPS young minds)"
- By introducing more and strong advantages for members
- By supporting grassroots initiatives from young scientists and students.
- I don't know even that we can be a member!
- By providing useful services. I when to the school, and I look at the calendar. If there was events, trainings, or secondments, I would have a reason to look at the website or get involved.
- Becoming No 1 reference for magnetism meetings and activity world wide.
- Improving readability of the existing means, like the website.
- I think that it should offer discounted fees for new members
- "work more closely with UK Magnetics Society more work with magnet manufacturers and suppliers (you come across as too academic biased) more about 'real world' magnets and magnetic applications (industrial applications for example)"
- Connect to other groups in magnetism, through representations at meetings such as German Physical Society meeting and other topical meetings on magnetism in s wider sense (including e.g. spintronics, magnetic molecules etc).
- More advertisement towards master students. I have never heard of EMA before my thesis while I did my internship in magnetism/spintronics labs.
- Let young PhD students have their own chapters that can organize seminars and tutorial-like sessions.
- "See previous answer. In addition: Establishing joint events-local events- with the different societies (AlMagn, CEMAG,...) to attract new members from the different countries."
- In Spain through University teachers: approx. 70% research belongs to Universities, eg. what is EMA, benefits, ...
- Been focused not only on spintronics but in other fields of magnetism as well
- "Increasing the social media visibility, and involving more small universities around the globe in hybrid events. P.D. Keep the online participants active between the discussions. There should be a special assistant all the time just in charge of zoom management on every activity. ESM 2022 mini-project meetings were very sad for the online participants. People forgot they existed..."
- "New website Networking events (at well established conferences?)"
- Welcome package for new PhD students when they register.
- Founding awards and/or travel grants
- Periodic presentation of different people (researchers, teachers, etc.) with a high value of their scientific creation, together with their academic institutions.
- presence and information on conferences
- Partnerships with other academic societies and publishing houses
- Conduct more online conferences and workshops
- More Outreach
- Participate in ALL magnetic conferences, seminars and events
- Use the name EMA more ubiquitously. Everyone who knows JEMS should also know EMA but I think this is not achieved yet.



- By providing some exciting content on YouTube.
- "Create a series of very short articles/videos of the important actions/work of the community. Improve social media and webpage appearance (including more audiovisual content).
- As with all things in academia it always feels like 'an olds boys club' and it is who you know etc. I have never found there to be much transparency in EMA, although I have worked in magnetics for nearly 20 years and lead a very active research. It often feels like a closed club.
- By having its most prominent members advertise its existence and goals whenever they give a keynote presentation at a major conference.
- Collaboration with the Psi-k network in electronic structure.
- Develop early career guides (eg publishing, interviews, research ideas), and technical tutorials (eg theory, experimental techniques) hosted on the EMA website- this would allow new students and PDRAs to discover content. These could be featured in the newsletter, and maybe done as videos as well, hosted on YouTube?
- Maybe more presence on the social media.
- "Keep finding financial support from people that have money and are interested in science: For example: ask for publicity in academic events, sport events, others. Make a school for children interested in magnetism. Make competitions events for children. Make an online shop for example with t-shirts related to physics and magnetism and toys for kids, etc. Then, give financial support to PhD students (like me) to participate in international conference and schools of magnetism. Select people of the community to post in social media like tik-tok and others like youtubers, etc. etc."
- Increase international participants outside Europe; for example US magnetism community is shrinking and we need to be active in this field.
- just continue to do what you are doing. It is Great!!
- promoting the Association during the magnetism conferences
- "I don't think there is much you can do to attract new members. Nevertheless, one possibility would be to offer a membership reduction at conferences but then you would have to charge membership, which might not be well-received. Another possibility is to send an email to the magnetism PI's to encourage them and their groups to join. To be honest, though, I didn't know that I was a member or that there is membership. I thought I was just on a mailing list."
- Continue with public outreach, liaison with IEEE, etc.
- More communication on LinkedIn
- Already seems pretty active to me. good job with all the online talks, early-stage researcher talks, andc arbonneutrality/gender equality officers
- Being active in university curricula by proposing remote lectures, exercises and tutorials
- Stronger diffusion in social media
- Make it more visible what the association actually does. I primarily only see it as a conference organiser. In a comparison to the IEEE, where there are clear initiatives which fund/support young researchers, for example the summer school, funding support to attend etc.
- Communication through social media is important to attract young researchers.
- "- Social media- Impactful work-> social media"
- Showcase at general physics conferences?
- By organizing workshops and schools in different countries
- "- Offering a reduced fee for members that belong to different associations: IEEE Magnetics, CEMAG, etc.- Reduced
 rates for postdocs- Benefits on individuals, not on reduced conference fees that are usually paid from project
 money.- Awards considering "
- Again, need to contact consider free events and seminars regularly
- Mutually beneficial cooperation with other organisations (APS, DPG, ÖPG, IEEE MagSoc, ...)?
- provide more purpose
- Support (by allowing for advertising) international and local conferences, seminars, and meetings, and be present at these events in some way.
- Online seminars
- "Most EMA members are from academic sector. There is a huge number of scientists/engineer that could be interested in being part of EMA if it brings useful information on modern magnetism.
- I feel, EMA is more academic driven. What about having invited talk from industry at the beginning of each section? Not about novelty on magnetism, but about the real current demand/challenges from industry."



- by establishing magnetism studying societies for countries and integrating these groups into the EMA.
- Use LinkedIn, research gate etc
- Prizes and grants
- by providing something we cannot get elsewhere.
- Maybe by using social media in a more attractive way?
- International scientific organisations, which EMA is one of, have a unique gift of bringing together representatives of many different ethnicities and cultures, giving them a platform for communication and cooperation. It saddens me deeply, that the current EMA policies are directed towards alienating a rather large part of the European and world scientific community, by not only essentially banning the scientists from Russia and Belarus, but by adopting the political agenda, many of their colleagues world-wide are not compliant with.
- Publish magnetism roadmap papers
- "Supporting other European conferences in magnetism (not necessarily financially, but for instance being present / supporting organizational procedure / ...) ?
- Be present / information stand on other European magnetism events?"
- By being better than the IEEE Magnetic Society. As of now I think the EMA is on the right path.
- "Become relevant by providing something that the community actually needs. Linking to the Spintronic Factory might help. Choice of speakers for the online seminar series is a bit haphazard, some are good but some are not well known. In the community it is regarded as the seminar series of friends of the organizers."
- Direct mails to people visiting scientific webpages or writing scientific papers, like me.
- No suggestions.
- More collaborations/joint events with the other global societies.
- using SNS
- Does EMA organize hybrid (zoom + live) summer schools on magnetism?
- More attention to Twitter (I learned about it right now).
- "The EMA should also concentrate on magnetism's applications and engineering aspects. It appears that only fundamentals and physical aspects are now prioritized."
- Advantages for students
- yes"E.g., by networking with IEEE and being present at Intermag and MMM by submitting papers by EMA members to the EPS magazine".
- Attract young people in the scientific community EMA
- "strengthening connections with research infrastructures at EU and national level and national magnetism associations dissemination and outreach activities in magnetism fields, including European Researchers Nights"
- "By contacting magnetism-related institutes' heads, asking them to promote EMA."
- Expand the outreach activities
- Visibility is already good
- "Reinforcing the relationship with the national magnetic societies"
- "IMHO, EMA is doing quite well, given the current operation mode. Perhaps highlighting the EMA activities and supportive actions at JEMS could be stronger, as this is the flagship EMA event for the whole community. Regarding membership, what currently defines who is a member? Attracting new members would become more relevant should the membership status change/evolve. I do not favor restricting access to any service for non-members to support the visibility of EMA actions and value. There could be an option to actively register to receive regular news updates or to vote in certain situations related to EMA activities and procedures (including but not limited to suggesting and approving GC members, award nominations, ...). The active registration would naturally select people with some interest in community matters. A discounted JEMS fee would be nice, but it only makes sense if there is some kind of membership fee (I currently do not support this, perhaps at a later stage)."
- Advertisement at other conferences. Newsletter once (?) per year for Universities.
- Spring meeting attendance.

EMA COMMENTS

The many suggestions will fuel the discussion as concerns the involvement of young scientists, membership, and link with national societies and communities.



11. Would you like to become active as a member in EMA, take up volunteer duties, or help us to support the community for actions such as:

ANALYSIS



EMA COMMENTS:

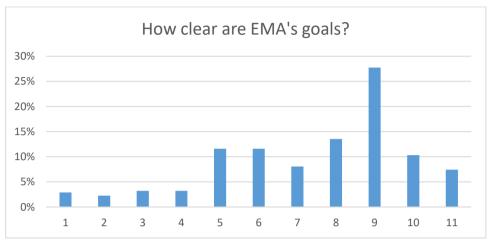


We have set two commissions in place that will address this topic. One commission will develop a strategy concerning the link with the national communities and the second one will discuss the involvement of young scientists. Actions will be taken accordingly.



12. Overall, how clear are EMA's goals to you and its position among other national, European, and international magnetism-related societies?

ANALYSIS



1= unclear, 11 = fully clear

EMA COMMENTS:

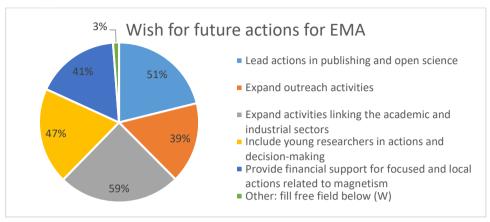


We are happy that the majority of the community feels that EMA's goals are clear; we will keep developing our strategies to support the community and are happy to consider any input that we will receive.



13. Please indicate up to three possible future actions you would like EMA to implement

ANALYSIS



OTHER ANSWERS:

- To help harmonise the magnetism sections in Europe and their actions, e.g. through cross-sectional meetings-To help harmonise online teaching of magnetism, for example by hosting MOOCs previously approved by communication professionals (not necessarily scientists)- Hire the services of communication professionals
- Strengthen connections to other associations in magnetism-together they can be stronger
- Magnetism-related topical workshops
- Leading outreach activities might be time-consuming but perhaps surveying and collecting activities conducted by the EMA members and making them available using EMA's communication tools.
- Forums of discussion around the overall orientation of our research in particular with respect to a more sustainable world
- how about create a full green open-access magnetism journal?
- own journal
- no action
- support initiatives for the reduction of carbon footprint of science

EMA COMMENTS



EMA is currently discussion four core topics, i.e., (1) Involvement of young scientist, (2), Membership, (3) Link with national communities and societies, and (4) Open science and proceedings. For the latter three commissions have been set up (see also EMA comments above). The answers confirm that there is a clear demand for these actions by the community, which reinsures us that it is the right time to develop these actions.



14. What is your opinion concerning the hybrid format and what experiences/thoughts would you like to share?

SUMMARY OF ANSWERS

- Mixed reactions- both positive and negative
- Creates a two-tier type participation
- Either fully in person or fully online may be better
- On-line poster sessions are pretty unpopular. Organizers must aim for on-site + on-line
- Use a virtual platform (e.g. GatherTown) for online participants to hang out on
- Hybrid format very beneficial for the researchers from developing countries, registration fees should be much lower (1/10)
- « ...there is a hybrid fatigue that undermines the community... », « seems to be some sort of greenwashing and/or symbol »

EMA COMMENTS



EMA has been committed since 2019 to organize both ESM and JEMS as hybrid events. We are still at the learning stage concerning hybrid mode and are happy to get detailed feedback that helps us improving our actions.



15. If you attended either JEMS or ESM in virtual rather than in-person format, what was your reason for doing so?

ANALYSIS



EMA COMMENTS:

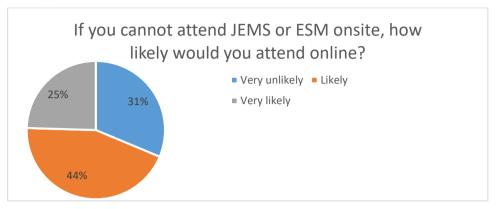


The outcome fits our initial vision to implement hybrid events: there is not one single reason but a large diversity that can make online events attractive in addition to the onsite parts, which remain crucial for direct networking.



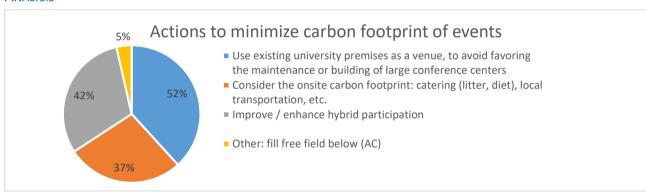
16. If you can't attend a future JEMS in person for whatever reason, how likely are you to attend online?

ANALYSIS



17. Which practical actions do you feel should be implemented to minimize the carbon footprint of EMA events?

ANALYSIS



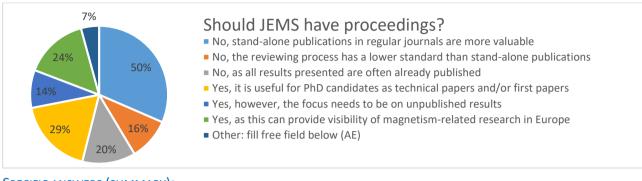
EMA COMMENTS:

This supports our actions started and led by the Officer for Carbon footprint, Bertand Dupé. Part of it was already translated in guidelines for sustainable events.



18. Should JEMS have proceedings?

ANALYSIS



SPECIFIC ANSWERS (SUMMARY):

- There is not a single possible form for proceedings. Innovative and interesting forms may exist
- Pros and cos are balanced
- No, all results presented are often already published. Encouraging the authors to present new results at conferences could be addressed during the selection process.
- Only interesting if indexed in the WoS
- Some promote links with a large scientific publisher, some promote alternative ways, more open.
- It depends on the outlet chosen and the standard of reviewing.
- Yes, this would promote newer results to be presented in conference (no more the case, often all is already published)
- Only if publication is costless.

EMA COMMENTS

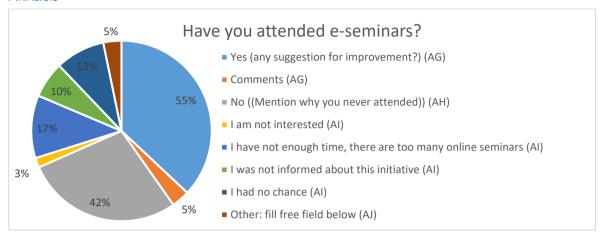


A commission has been set in place to discuss this matter taking into account the input of the survey, with the goal to develop a respective strategy for EMA.



19. Have you ever attended an EMA Plenary e-Lecture or early career e-seminar?

ANALYSIS



OTHER ANSWERS:

- 5 comments over 15: I am not interested in the topics
- 3 comments over 15: I have no time/attend SPICE seminars
- 2 comments over 15: I was not informed

EMA COMMENTS

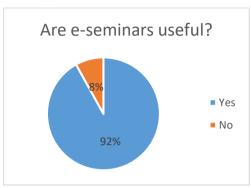


We are happy that the majority has attended / is aware of the e-lecture and e-seminar series offered by EMA. We have the ambition to raise this number even further and will take according measures.



20. Do you think that the EMA Plenary e-Lecture or early career e-seminar are useful, e.g., for ensuring a broad visibility of the members work and/or for networking?

ANALYSIS



OTHER ANSWERS:

- 7 comments over 30: ok for visibility, more difficult networking (on site is better for networking)
- 4 comments over 30: they need to be more general (plenary lecture are more useful than early career seminar)
- 4 comments over 30: yes, they are useful
- 5 comments over 30: the community/attendance is too small(3)/ there are too many online seminar(2)
- 2 comments over 30: choice of topics biased

EMA COMMENTS



We feel that the vast majority of attendees is happy with the format of the e-lectures / e-seminars. However, we acknowledge that a higher number of participants is desirable, reaching out to a larger part of the community. Respective actions are under way.