

Reviewing ISMIR Papers

Some Personal Thoughts

Meinard Müller

International Audio Laboratories Erlangen
meinard.mueller@audiolabs-erlangen.de

Reviewer Q&A Session for ISMIR 2022
Online, May 27, 2022

Meinard Müller

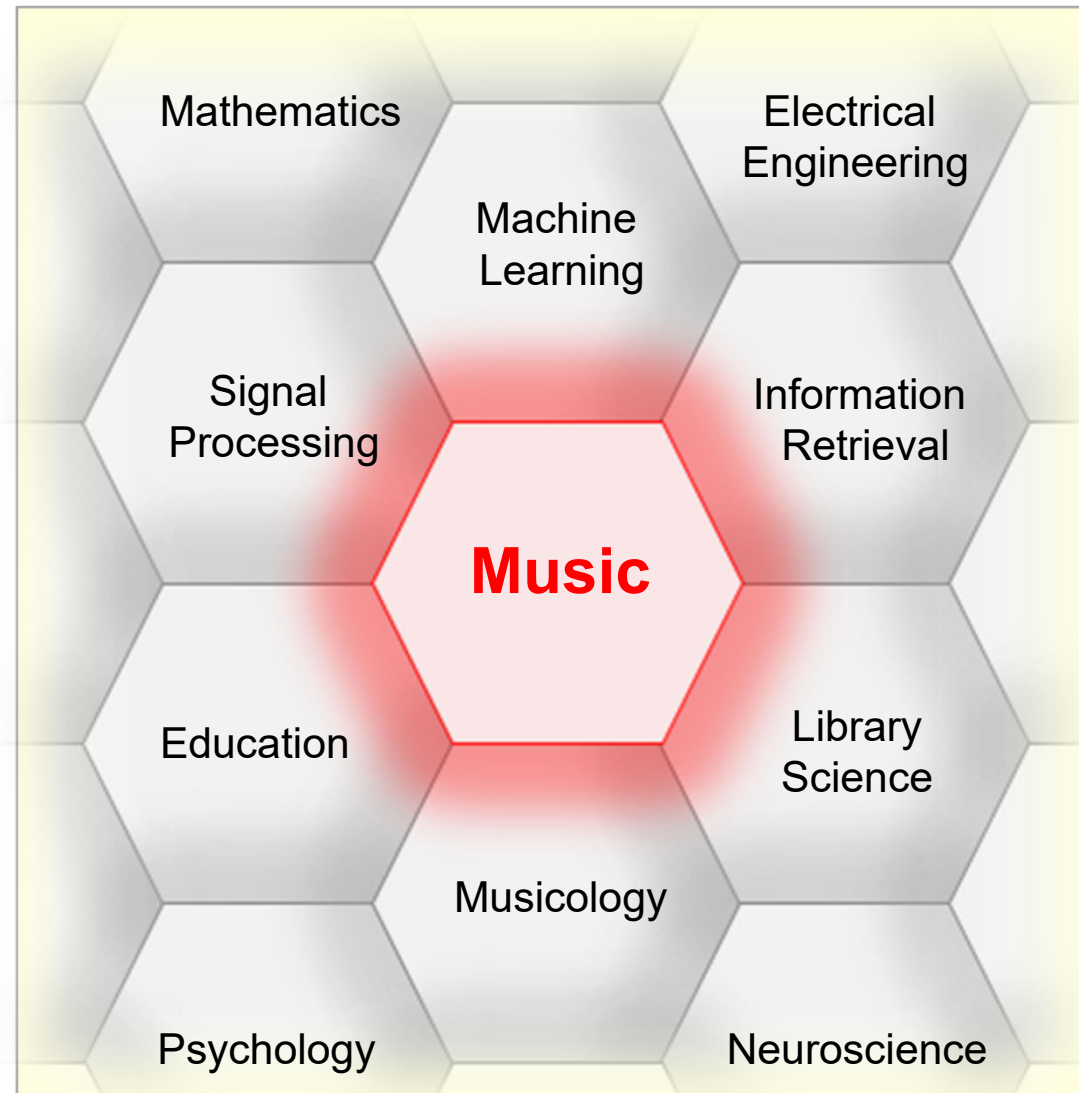


- Academic Background
 - 1997: Master (Mathematics)
 - 2001: PhD (Computer Science)
 - 2007: Habilitation (Information Retrieval)
 - 2012: Professor (Semantic Audio Processing)
- Personal ISMIR History
 - 2003: First ISMIR paper as co-author
 - 2012 & 2015: Scientific program chair
 - 2009-2021: Member of ISMIR Board
 - 2020/2021: President of ISMIR
- IEEE Fellow (Music Signal Processing)
- ACM Senior Member



What is MIR?

- Research of computational systems to help humans understand music-related data
- Multifaceted area drawing from a diverse set of disciplines



Why is ISMIR special?

ISMIR

- We all love music and technology ...
- Independent, young, and vibrant community
- Support for next generation of scientists
- Equal focus on research and education
- Encouragement of interdisciplinarity & diversity
- Support of open access and reproducibility

ISMIR Conference

ISMIR

- Yearly conference
- Open access to all articles
- Copyright stays with authors
- 200 – 500 participants (increasing number)
- 100 – 120 papers accepted (acceptance rate 40 – 50 %)
- **ISMIR is where you get the best feedback for your work on MIR**
- **ISMIR is where you meet people who know and love MIR**

Review Decision Process

- **Scientific Program Chairs**
 - ISMIR 2022: Masataka Goto, Rafael Caro, Xavier Serra, Rachel Bittner
 - Organize review process
 - Make final decisions (accept vs. reject)
 - Compile scientific program
- **Meta Reviewers**
 - Help selecting reviewers
 - Review papers
 - Lead discussion phase
 - Provide summary with preliminary decision
- **Reviewers**
 - Review papers
 - Participate in discussion phase

What Should a Review Achieve?

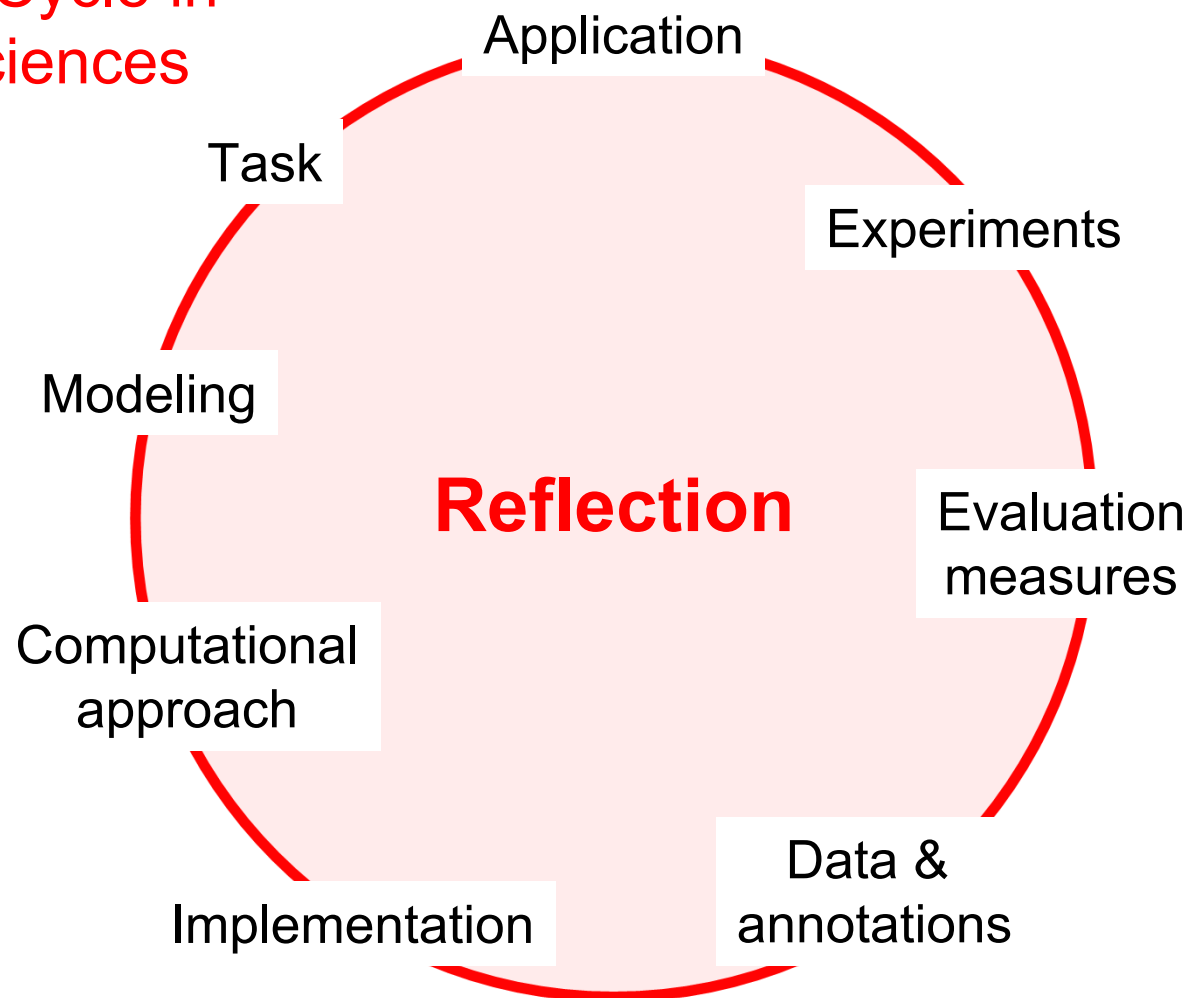
- Help scientific program chairs making a fair and transparent decision
- Help meta reviewers making a balanced recommendation
- Work out strengths and weaknesses of paper
- Give authors feedback on their work
- Help authors improve their work
- Support and shape the ISMIR community

What are Possible Evaluation Criteria?

- **Appropriateness of topic**
 - Does the paper fit into the scope of ISMIR?
- **Scientific and technical soundness**
 - Is the notation and math correct?
- **Reproducibility**
 - Can the results can be understood and reproduced?
- **Readability & paper organization**
 - Are the essential points worked out clearly? Is there a take-home message?
- **Stimulation potential**
 - May the paper trigger exciting discussions?
- **Novelty and relevance**
 - Does the paper make some original and substantial “contributions”?
 - Does the paper provide “insights”?

What is a “Contribution”? What are “Insights”?

Research Cycle in Applied Sciences



The Blessing and Curse of Applied Sciences

- You can make contributions in many ways
 - Novel application or task
 - Novel computational approach
 - Efficient implementation
 - Novel dataset and annotations
 - Novel evaluation measures
 - Interesting experiments
 - ...
- A problem is hardly ever “solved” – so you can always contribute something
- You never “solve” a problem completely
- You always miss some aspects
- Your modelling always goes along with simplifications
- Your work is always vulnerable and disputable

Accept

REJECT

The Blessing and Curse of Interdisciplinarity

- You can make contributions coming from various disciplines
 - Information retrieval
 - Signal processing
 - Musicology
 - Library sciences
 - Human computer interaction
 - Machine learning
 - ...
- You can contribute with novel collaborative work
- There are many different perspectives on your work
 - Technical perspective
 - Music perspective
 - Data perspective
 - ...
- You will never do justice to all disciplines
- Your work is always vulnerable and disputable

Accept

REJECT

The Blessing and Curse of ISMIR

- Support of young researchers
- Balance in topics and approaches
- High acceptance rate (40-50%)
- Open exchange of ideas
- Cooperative environment
- Authors and reviewers may have little experience
- Inconsistent reviews
- Paper quality is very mixed
- Get a publication out
- Competitive environment

Accept

REJECT

What You Should Keep in Mind

- Show respect
 - Show that you care and appreciate the article
 - Authors have worked hard
 - Stay positive and assume good faith
 - Be clear and direct, but also encouraging
 - Criticize the work, but not the authors

What You Should Keep in Mind

- Show respect
- Be detailed and specific

- Short reviews are hardly useful (and may even be harmful)

“ ... I like the paper, and I think it should be accepted ...”

“ ... This paper offers no technical novelty and should be rejected ...”

- Your review should help
 - Authors
 - Meta reviewers
 - Program chairs / editors
- Justify the score in detail
- However, do not get lost in details (fixing typos, re-writing, ...)

What You Should Keep in Mind

- Show respect
- Be detailed and specific
- Make your perspective explicit

- You may mention your background in the review
- Explain which perspective you take

“ ... My background is in music sciences, and I look at the paper from a musicological perspective ...”

“ ... In the following, I want to comment on the paper from a technical perspective ...”

What You Should Keep in Mind

- Show respect
 - Be detailed and specific
 - Make your perspective explicit
 - Be honest
- Never write something you are not sure of
 - Better admit when you are lost and focus on the aspects you know well
- “ ... Since I am not familiar with ... I do not comment on the technical contributions ... However, from an application perspective, I can say that ... ”
- Note: We are all learners in almost all areas

What You Should Keep in Mind

- Show respect
 - Be detailed and specific
 - Make your perspective explicit
 - Be honest
 - Take a clear position
- Use the whole spectrum of evaluation scores
 - If you find a paper outstanding, give it the highest score
 - If you think the paper is really bad, give it the lowest score
 - Always give convincing support for your recommendation

What You Should Keep in Mind

- Show respect
 - Be detailed and specific
 - Make your perspective explicit
 - Be honest
 - Take a clear position
 - Actively participate
- Read guidelines and examples
 - Participate in discussion phase
 - If you are unsure, ask for help
 - Supervisor
 - Meta reviewers
 - Program chairs / editors
 - Better cancel in time than be sloppy

Dealing with poor reviews is an editor's worst job

- Be reliable and responsive

Chasing after reviewers is an editor's second worst job

Why Should You Become a Reviewer?

- Read interesting articles
- Learn about new research trends
- Get to know “the other side”
- Reflect on your own work and publications
- Support the next generation of researchers
- Become part and give something back to the community

Guidelines for Reviewers (ISMIR 2012)



Guidelines for Reviewers International Society for Music Information Retrieval (ISMIR)

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TECHNICAL GUIDELINES

Scheduling

As soon as you are notified of your assigned paper, please check all of them to make sure that

- there is no obvious conflict of interest (see section on *Conflict of Interest* below)
- the number of assigned papers and the deadline allow you enough time to complete your reviews (see section on *Commitment and Respect* below);
- you are qualified to review the papers assigned;
- none of the papers assigned to you violates any of the paper submission guidelines.

If any issues arise regarding these points, notify them immediately to the *Scientific Committee*. You should schedule in advance your review work, and not leave it for the last few days near the deadline. Adhering to the deadline is essential, since the *Scientific Committee* and Chairs still have a huge amount of work to do after the review process has been completed. It is advisable to read papers well in advance before the deadline, in order to have time to think about them over a sufficiently long timespan before writing your reviews. This is essential in order for you to make thoughtful decisions about your assigned papers, and to provide helpful suggestions for the authors.

Evaluation Criteria

Your evaluation of the papers assigned to you should be based upon the following criteria:

- Novelty of the paper
- Scholarly/scientific quality
- Technical soundness
- Appropriateness of topic
- Importance
- Paper organization
- Readability
- Stimulation potential
- Fostering of open source and free software tools/data
- Fostering reproducibility of research
- Contribution to the overall balance of topics at ISMIR 2012

Keep in mind that minor flaws can be corrected, and should not be a reason to reject a paper. However, accepted papers have to be technically sound and make an original and substantial contribution to the field, also in relation with the topics of the conference: please familiarize yourself with the information in the Call for Submissions.

When deciding your recommendation for a paper, do not be shy. Use the whole spectrum of evaluation scores: if you think a paper is outstanding, give it the highest score and no less than that. Similarly, if you think a paper is really bad (and can convincingly support your opinion), then give it the lowest score and no more than that. Very often reviewers tend to use intermediate scores, because they are not entirely confident on their judgement, and/or because they did not have time to read their papers thoroughly. This attitude causes really good papers not to stand out, and very bad papers not to be "taught". Ensure that your scores are consistent with your comments to the authors. In particular, receiving good comments and a poor score is frustrating, and often causes the authors to request clarifications or rebuttals.

Comments for the Authors

Your comments for the authors are probably the most important part of your reviews. They will be returned to the authors, so you should include any specific feedback which help improve the papers. Thorough comments also help the *Scientific Committee* decide which papers to accept, sometimes more than your score. Remember that your reviews are evaluated by the *Scientific Committee*. Moreover, after the completion of the review process, they will be available to other reviewers of the same papers. Therefore your good work will help generating a positive trend in the research community.

Short reviews are not helpful to either the authors and the *Scientific Committee*. Please be as specific and detailed as you can. When discussing related work and references, simply saying "this is well known" or "this has been common practice for years" is not appropriate. You should cite publications, or other public disclosures of techniques, which can support your statements. Be specific also when you suggest improvements in the writing. If there is a particular passage in the text that is unclear, point it out and give suggestions for improvements.

Be generous about providing new ideas for improvement. You may suggest different techniques or tools to be used in the applications presented in a paper. You may also suggest the authors a new application area that might benefit from their work. You may suggest them a generalization of their concept, which they have not considered. If you think that the paper has merits but does not match the topics of the ISMIR conference, please say so and suggest alternative publication options that are more appropriate in your opinion (journals, conferences, workshops).

ETHICAL GUIDELINES

Commitment and Respect

Remember that academic careers and reputations rely on scientific publications. Therefore you have to be seriously committed to your work as a reviewer.

In the past there have been complaints about some reviews being too sketchy and superficial, so that it looked like the reviewer did not take the time to read the paper carefully. A sketchy or casual review is a lack of respect to the authors who have seriously submitted their paper, and in the long run is a damage to the ISMIR conference. If you have agreed to review a paper, you should devote enough time to write a thoughtful and detailed review. If you think you cannot review properly your assigned papers because you are too busy, you should not commit to your assignment.

Keep in mind that belittling or sarcastic comments are not appropriate. Even if you think that a paper is really bad, you should be constructive and still provide feedback to the authors. If you give a paper a low score, it is essential that you justify the reason for that score in detail. Just saying "I do not like this approach because I am a guru in this area" is not constructive. Also keep in mind that directly talking about the authors can be sometimes perceived as being confrontational, even though you do not mean it this way. For this reason, you may want to avoid referring to the authors by using the phrase "you" or "the authors", and use instead "the paper".

Confidentiality and Anonymity

As a reviewer you have the responsibility to protect the confidentiality of the ideas represented in the papers you review. Submissions to the ISMIR conference have not (or should not have) been published before.

Although the authors' ultimate goal is to publish and disseminate their work, a percentage of submitted papers will not be accepted and published in the ISMIR conference proceedings, and will most likely be submitted to some other journal or conference. Sometimes a submitted paper is still considered confidential by the author's employers or funding sources. In order to comply with confidentiality requirements,

- you should not show your assigned papers (or their accompanying material) to anyone else, including colleagues or students, unless you have asked them to help with your review;
- you should not use ideas from your assigned papers to develop new ones;
- after completing your reviews you should destroy all copies of your assigned papers and accompanying material, and erase any implementations you may have written and results you may have obtained to evaluate the ideas in the papers.

Although some reviewers like to disclose their identity to authors, it is advisable not to do so. One of the most common ways of inadvertently disclosing your identity is asking the authors to cite your past work and several of your own papers. This should be avoided. Besides, this attitude may have a negative effect on your review: it may be seen as if you just want to gain more citations, and may ultimately result in the authors just ignoring your review (and possibly the *Scientific Committee* too).

Conflicts of Interest

Even though you would judge impartially any paper assigned to you, there has to be no doubt about the impartiality of your reviews. Therefore, if there is a potential conflict of interest with one of your assigned papers, you should inform the *Scientific Committee*. Although in general you should use your judgment, examples of situations of potential conflicts of interest are the following:

- you work in the same research group as one of the authors;
- you have been involved in the work and will be credited in some way (e.g. you have hosted one of the authors in your lab, to carry out work related to the paper);
- you have formally collaborated (e.g., written a paper together, or been awarded a joint grant) with one of the authors in the past three years (more or less);
- you were the MS/PhD advisor (or advisee) of one of the authors: this is often considered to be a lifetime conflict of interest;
- you have reasons to believe that others might see a conflict of interest, even though there is none (e.g., you and one of the authors work for the same multinational corporation, although you work in different departments on different continents and have never met before).

ACKNOWLEDGEMENTS

This document closely follows the guidelines of the SMC 2011 conference and is partially based on the reviewers' guidelines of the CVPR2010 and SIGGRAPH2008 conferences:

- <http://smc2011.smcnetwork.org/>
- http://cvl.umiacs.umd.edu/conferences/cvpr2010/review/reviewer_guidelines.htm
- <http://www.siggraph.org/s2008/submissions/juried/papers/instructions.php>

Guidelines for Reviewers (ISMIR 2012)



Guidelines for Reviewers
International Society for Music Information Retrieval (ISMIR)







<p>TECHNICAL GUIDELINES</p> <p>When deciding your recommendation for a paper, do not be shy. Use the whole spectrum of evaluation scores: if you think a paper is really, if your Very are not did not really 'ought'. to the ore is ns or</p> <p>part of should pers.</p> <p>Still have a huge amount of work to do after the review process has been completed. It is advisable to read papers well in advance before the deadline, in order to have time to think about them over a sufficiently long timespan before writing your reviews. This is essential in order for you to make thoughtful decisions about your assigned papers, and to provide helpful suggestions for the authors.</p> <p>Evaluation Criteria</p> <p>Your evaluation of the papers assigned to you should be based upon the following criteria:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Novelty of the paper <input type="checkbox"/> Scholarly/scientific quality <input type="checkbox"/> Technical soundness <input type="checkbox"/> Appropriateness of topic <input type="checkbox"/> Importance <input type="checkbox"/> Paper organization <input type="checkbox"/> Readability <input type="checkbox"/> Stimulation potential <input type="checkbox"/> Fostering of open source and free software tools/data <input type="checkbox"/> Fostering reproducibility of research <input type="checkbox"/> Contribution to the overall balance of topics at ISMIR 2012 <p>Keep in mind that minor flaws can be corrected, and should not be a reason to reject a paper. However, accepted papers have to be technically sound and make an original and substantial contribution to the field, also in relation with the topics of the conference: please familiarize yourself with the information in the Call for Submissions.</p>	<p>Technical Guidelines</p> <ul style="list-style-type: none"> ▪ Scheduling ▪ Evaluation Criteria ▪ Comments for the Authors <p>Thorough comments also help the Scientific Committee decide which papers to accept, sometimes more than your score. Remember that your reviews are evaluated by the Scientific Committee. Moreover, after the completion of the review process, they will be available to other reviewers of the same papers. Therefore your good work will help generating a positive trend in the research community.</p> <p>Short reviews are not helpful to either the authors and the Scientific Committee. Please be as specific and detailed as you can. When discussing related work and references, simply saying "this is well known" or "this has been common practice for years" is not appropriate. You should cite publications, or other public disclosures of techniques, which can support your statements. Be specific also when you suggest improvements in the writing. If there is a particular passage in the text that is unclear, point it out and give suggestions for improvements.</p> <p>Be generous about providing new ideas for improvement. You may suggest different techniques or tools to be used in the applications presented in a paper. You may also suggest the authors a new application area that might benefit from their work. You may suggest them a generalization of their concept, which they have not considered. If you think that the paper has merits but does not match the topics of the ISMIR conference, please say so and suggest alternative publication options that are more appropriate in your opinion (journals, conferences, workshops).</p>
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Guidelines for Reviewers
International Society for Music Information Retrieval (ISMIR)

<p>ETHICAL GUIDELINES</p> <p>Although some reviewers like to disclose their identity to authors, it is not recommended. One of the reasons is that it may lead to a conflict of interest.</p> <p>Keep your work confidential. Do not discuss the content of the papers you are reviewing with anyone else, including colleagues or students, unless you have asked them to help with your review.</p> <p>Do not use ideas from your assigned papers to develop new ones.</p> <p>After completing your reviews you should destroy all copies of your assigned papers and accompanying material, and erase any implementations you may have written and results you may have obtained to evaluate the ideas in the papers.</p>	<p>Ethical Guidelines</p> <ul style="list-style-type: none"> ▪ Commitment and Respect ▪ Confidentiality and Anonymity ▪ Conflicts of Interest <p>As a reviewer you have the responsibility to protect the confidentiality of the ideas represented in the papers you review. Submissions to the ISMIR conference have not (or should not have) been published before.</p> <p>Although the authors' ultimate goal is to publish and disseminate their work, a percentage of submitted papers will not be accepted and published in the ISMIR conference proceedings, and will most likely be submitted to some other journal or conference. Sometimes a submitted paper is still considered confidential by the author's employers or funding sources. In order to comply with confidentiality requirements,</p>	<p>way (e.g. you have hosted one of the authors in your lab, to carry out work related to the paper);</p> <ul style="list-style-type: none"> <input type="checkbox"/> you have formally collaborated (e.g., written a paper together, or been awarded a joint grant) with one of the authors in the past three years (more or less); <input type="checkbox"/> you were the MS/PhD advisor (or advisee) of one of the authors: this is often considered to be a lifetime conflict of interest; <input type="checkbox"/> you have reasons to believe that others might see a conflict of interest, even though there is none (e.g., you and one of the authors work for the same multinational corporation, although you work in different departments on different continents and have never met before). <p>ACKNOWLEDGEMENTS</p> <p>This document closely follows the guidelines of the SMC 2011 conference and is partially based on the reviewers' guidelines of the CVPR2010 and SIGGRAPH2008 conferences:</p> <ul style="list-style-type: none"> <input type="checkbox"/> http://smc2011.smcnetwork.org/ <input type="checkbox"/> http://cvl.umiacs.umd.edu/conferences/cvpr2010/review/reviewer_guidelines.htm <input type="checkbox"/> http://www.siggraph.org/s2008/submissions/juried/papers/instructions.php
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Literature & Links

- Meinard Müller, Perfecto Herrera, Luis Gustavo Martins, Fabien Gouyon: Guidelines for Reviewers. ISMIR 2012
https://ismir2012.ismir.net/authors/submission/2012_ISMIR_GuidelinesReview.pdf 
- ISMIR Reviewer guidelines (ISMIR website)
<https://ismir.net/reviewer-guidelines/> 
- Tom Collins: ISMIR Review Examples. 2015 (updated 2019)
<https://tomcollinsresearch.net/pdf/ismirReviewExamples.pdf> 
- Blair Kaneshiro, Jordan B. L. Smith: Insights on the ISMIR Reviewing Experience. ISMIR 2021 Blog
<https://ismir2021.ismir.net/blog/insights/> 
<https://ismir2021.ismir.net/blog/insights2/> 
- Blair Kaneshiro, Zhiyao Duan, Juhan Nam, Preeti Rao, Peter van Kranenburg, Jordan B.L. Smith: Preparing a Successful ISMIR Submission. ISMIR 2021 Blog
<https://ismir2021.ismir.net/blog/preparing/> 
- ISMIR 2022 Review Form
<https://ismir2022.ismir.net/reviewform> 