

## Checklist for SPC2021 Proceeding

Authors are required to go through each point in this checklist and make sure that the submitted article agrees with the *JPCS*'s format (IOP's style) and the SPC2021 terms. Authors must check  ALL LISTED POINTS to confirm that the article is free from errors and accept REJECTION if errors still appear even the authors have confirmed for correctness.

Article title : Simulation of wave propagation using graph-theoretical algorithm

ID : 129

1.	Guidelines																
<input checked="" type="checkbox"/>	1.1. The authors have gone through <a href="https://publishingsupport.iopscience.iop.org/author-guidelines-for-conference-proceedings/">https://publishingsupport.iopscience.iop.org/author-guidelines-for-conference-proceedings/</a> , carefully followed the “ <b>Templates and guidelines for proceedings papers</b> ” (Essential guidelines) and used the provided template (Microsoft Word or LaTeX) without modifying the embedded styles.																
2.	Introduction																
<input checked="" type="checkbox"/>	2.1. Set up the page's margin with the following measurements. <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="border-bottom: 1px solid black; padding: 2px;">Margin</th> <th style="padding: 2px;"><b>A4 ONLY – DO NOT USE US LETTER</b></th> </tr> </thead> <tbody> <tr><td style="padding: 2px;">Top</td><td style="padding: 2px; text-align: right;">4.0 cm</td></tr> <tr><td style="padding: 2px;">Bottom</td><td style="padding: 2px; text-align: right;">2.7 cm</td></tr> <tr><td style="padding: 2px;">Left</td><td style="padding: 2px; text-align: right;">2.5 cm</td></tr> <tr><td style="padding: 2px;">Right</td><td style="padding: 2px; text-align: right;">2.5 cm</td></tr> <tr><td style="padding: 2px;">Gutter</td><td style="padding: 2px; text-align: right;">0 cm</td></tr> <tr><td style="padding: 2px;">Header</td><td style="padding: 2px; text-align: right;">0 cm</td></tr> <tr><td style="padding: 2px;">Footer</td><td style="padding: 2px; text-align: right;">0 cm</td></tr> </tbody> </table>	Margin	<b>A4 ONLY – DO NOT USE US LETTER</b>	Top	4.0 cm	Bottom	2.7 cm	Left	2.5 cm	Right	2.5 cm	Gutter	0 cm	Header	0 cm	Footer	0 cm
Margin	<b>A4 ONLY – DO NOT USE US LETTER</b>																
Top	4.0 cm																
Bottom	2.7 cm																
Left	2.5 cm																
Right	2.5 cm																
Gutter	0 cm																
Header	0 cm																
Footer	0 cm																
3.	Formatting the title, authors and affiliations																
<input checked="" type="checkbox"/>	3.1. Title is set 17-point Times Bold, flush left, unjustified. The first letter of the title is capitalized with the rest in lower case and not indented. Leave 28 mm of space above the title and 10 mm after the title.																
<input checked="" type="checkbox"/>	3.2. List of authors is indented 25 mm to match the abstract. The style for the names is initials then surname, with a comma after all but the last two names, which are separated by ‘and’. Initials should not have full stops—for example <b>A J Smith</b> and <i>not</i> <b>A. J. Smith</b> . First names in full may be used if desired.																
<input checked="" type="checkbox"/>	3.3. Affiliations are listed as full, complete and country included. The addresses of the authors' affiliations follow the list of authors and must be indented 25 mm to match the abstract. If the authors are at different addresses, numbered superscripts should be used after each surname to reference an author to his/her address. Ensure that any numbered superscripts used to link author names and addresses start at 1 and continue to the number of affiliations. For instance, consider the following example :																

# Spin dynamics in geometrically frustrated antiferromagnetic pyrochlores

J S Gardner<sup>1,2,6</sup>, G Ehlers<sup>3</sup>, S T Bramwell<sup>4</sup> and B D Gaulin<sup>5</sup>

<sup>1</sup> Physics Department, Brookhaven National Laboratory, Upton, NY 11973-5000, USA

<sup>2</sup> NIST Center for Neutron Research, National Institute of Standards and Technology, Gaithersburg, MD 20899-8562, USA

<sup>3</sup> SNS Project, Oak Ridge National Laboratory, 701 Scarboro Road, Oak Ridge, TN 37830, USA

<sup>4</sup> Department of Chemistry, University College London, 20 Gordon Street, London WC1H 0AJ, UK

<sup>5</sup> Department of Physics and Astronomy, Canadian Institute for Advanced Research, McMaster University, Hamilton, ON, L8S 4M1, Canada

## 4. Formatting the text

4.1. The text of the paper is formatted throughout the paper as follows:

- 11 point Times or Times New Roman.
- The text should be set to single line spacing.
- Paragraphs should be justified.

## 5. Sections, subsections and subsubsections

5.1. Style and spacing

	Font	Spacing
Section	11 point <b>Times bold</b>	1 line space before a section No additional space after a section heading
Subsection	11 point <i>Times Italic</i>	1 line space before a subsection No space after a subsubsection heading
Subsubsection	11 point <i>Times Italic</i>	Subsubsections should end with a full stop (period) and run into the text of the paragraph

5.2. Sections are numbered chronologically with a dot following the number and then separated by a single space:

- sections are numbered 1, 2, 3, etc
- subsections are numbered 2.1, 2.2, 2.3, etc
- subsubsections are numbered 2.3.1, 2.3.2, etc

## 6. Figures

6.1. The size of the text in figures (apart from superscripts/subscripts) is approximately the same size as the main text (11 points).

6.2. Each figure has a brief caption describing it and captions are below the figure and separated from it by a distance of 6 points.

6.3. Figures are numbered sequentially through the text—‘**Figure 1.**’, ‘**Figure 2.**’ and so forth (notice the dot) and are referenced in the text as ‘figure 1’, ‘figure 2’,... and not ‘fig. 1’, ‘fig. 2’, ....

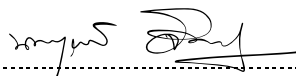
6.4. Individual figures are centered or placed two figures side-by-side if fit comfortably to save space. The figures are placed as close as possible after the point where it is first referenced in the text. Figures do not appear within or after the reference list.

<input checked="" type="checkbox"/>	6.5. If a figure has parts, they are labelled as (a), (b), (c) etc on the actual figure. Parts should not have separate captions.										
7. Tables											
<input checked="" type="checkbox"/>	7.1. Tables should be centered unless they occupy the full width of the text, e.g.  <p style="text-align: center;"><b>Table 3.</b> A simple table. Place the caption above the table. Here the caption is wider than the table so we extend it slightly outside the width of the table. Justify the text. Leave 6 pt of space between the caption and the top of the table.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Distance (m)</th> <th style="text-align: center;">Velocity (ms<sup>-1</sup>)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">100</td> <td style="text-align: center;">23.56</td> </tr> <tr> <td style="text-align: center;">150</td> <td style="text-align: center;">34.64</td> </tr> <tr> <td style="text-align: center;">200</td> <td style="text-align: center;">23.76</td> </tr> <tr> <td style="text-align: center;">250</td> <td style="text-align: center;">27.9</td> </tr> </tbody> </table>	Distance (m)	Velocity (ms <sup>-1</sup> )	100	23.56	150	34.64	200	23.76	250	27.9
Distance (m)	Velocity (ms <sup>-1</sup> )										
100	23.56										
150	34.64										
200	23.76										
250	27.9										
<input checked="" type="checkbox"/>	7.2. If a table is divided into parts, they are labelled (a), (b), (c) etc but there is only one caption for the whole table, not separate ones for each part.										
<input checked="" type="checkbox"/>	7.3. Tables are numbered sequentially throughout the text —‘ <b>Table 1.</b> ’, ‘ <b>Table 2.</b> ’ and so forth (notice the dot) and referred to in the text by number (Table 1, not Tab. 1 etc). Captions are placed at the top of the table and have a full stop (period) at the end. Except for very narrow tables with a wide caption the caption should be the same width as the table.										
8. Equations											
<input checked="" type="checkbox"/>	8.1. Equation Editor or MathType fonts, including sizes, are set up to match the text of the document. If Mathtype was used, the equation preference should be set back to factory setting.										
<input checked="" type="checkbox"/>	8.2. The font used is <b>Times New Roman</b> .										
<input checked="" type="checkbox"/>	8.3. All variables used are <i>italic</i> . Also, the equations are put at the center of the page, with equation number placed at the right margin.										
<input checked="" type="checkbox"/>	8.4. Equations are to be aligned centered; however, long equations continuing on subsequent lines should start flush left. Any continuation lines in such equations should be indented by 25 mm.										
<input checked="" type="checkbox"/>	8.5. Equations are numbered sequentially throughout the text (i.e., (1), (2), (3), ... )										
<input checked="" type="checkbox"/>	8.6. When referencing the equation in text, the word ‘equation’ is SPELL OUT in full, e.g. ‘if equation (5) is factorized’; <b>DO NOT</b> use abbreviations such as ‘eqn.’ or ‘eq.’										
9. Appendices											
<input checked="" type="checkbox"/>	9.1. Appendices are included at the end of the main text of the paper, after the acknowledgments section (if any) but before the reference list.										
10. Reference											
<input checked="" type="checkbox"/>	10.1. All the references are accurate and carefully formatted using the <i>Journal of Physics: Conference Series</i> ’ guidelines.										
<input checked="" type="checkbox"/>	10.2. The reference is consisting of (in order) : name(s) and initials; year published; title of journal ( <i>italic</i> , abbreviated), book or other publication; titles of journal articles may also be included (optional); volume number ( <b>bold</b> ); editors (if any); town of publication and publisher in parentheses for books; the page numbers. For instance, consider										

	<p><b>References</b></p> <p>[1] Strite S and Morkoc H 1992 <i>J. Vac. Sci. Technol. B</i> <b>10</b> 1237</p> <p>[2] Gusev A A <i>et al</i> 2011 <i>J. Phys.: Conf. Series</i> <b>291</b> 012052</p> <p>[3] Kurata M 1982 <i>Numerical Analysis for Semiconductor Devices</i> (Lexington, MA: Heath)</p> <p>[4] Kunze K 2003 T-duality and Penrose limits of spatially homogeneous and inhomogeneous cosmologies <i>Phys. Rev. D</i> <b>68</b> 063517 (<i>Preprint gr-qc/0303038</i>)</p> <p>[5] Milson R, Coley A, Pravda V and Pravdova A 2004 Alignment and algebraically special tensors <i>Preprint gr-qc/0401010</i></p> <p>[6] Caplar R and Kulisic P 1973 <i>Proc. Int. Conf. on Nuclear Physics (Munich)</i> vol 1 (Amsterdam: North-Holland) p 517</p> <p>[7] Kuhn T 1998 <i>Density matrix theory of coherent ultrafast dynamics Theory of Transport Properties of Semiconductor Nanostructures</i> (Electronic Materials vol 4) ed E Schöll (London: Chapman and Hall) chapter 6 pp 173–214</p>												
<input checked="" type="checkbox"/>	<p>10.3. There is a 5 mm gap between the reference number and the start of the reference text. Second and subsequent lines of individual references should be indented by 5 mm. For example:</p> <p>[1] Aderhold J, Davydov V Yu, Fedler F, Klausning H, Mistele D, Rotter T, Semchinova O, Stemmer J and Graul J 2001 <i>J. Cryst. Growth</i> <b>222</b> 701</p>												
<input checked="" type="checkbox"/>	<p>10.4. Authors appear in the form surname (with only the first letter capitalized) followed by the initials with no periods after the initials. Authors are separated by <b>a comma except for the last two</b> which should be separated by ‘and’ with no comma preceding it.</p>												
<input checked="" type="checkbox"/>	<p>10.5. The article title (if given) are lower case letters, except for an initial capital/specific terms, and should follow the date/year. Article title is optional and can be omitted. If omitted, it must be the same for all references.</p>												
<input checked="" type="checkbox"/>	<p>10.6. The journal title is in italic and is abbreviated. If a journal has several parts denoted by different letters the part letter should be inserted after the journal in Roman type, e.g. <i>Phys. Rev. A</i>. <b>Do not join the part letter to the volume number in bold type.</b></p>												
<input checked="" type="checkbox"/>	<p>10.7. Both the initial and final page numbers should be given where possible. The final page number should be in the shortest possible form and separated from the initial page number by an en rule ‘–’, e.g. 1203–14, <b>i.e. the numbers ‘12’ are not repeated. (NOTE : en rule is not hyphen or dash)</b></p>												
<input checked="" type="checkbox"/>	<p>10.8. References to printed journal articles. A normal reference to a journal article contains three changes of font (see the following table).</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="border-top: 1px solid black; border-bottom: 1px solid black;">Element</th> <th style="border-top: 1px solid black; border-bottom: 1px solid black;">Style</th> </tr> </thead> <tbody> <tr> <td>Authors, date</td> <td>Roman type</td> </tr> <tr> <td>Article title (optional)</td> <td>Roman type</td> </tr> <tr> <td>Journal title</td> <td>Italic type</td> </tr> <tr> <td>Volume number</td> <td>Bold type</td> </tr> <tr> <td style="border-bottom: 1px solid black;">Page numbers</td> <td style="border-bottom: 1px solid black;">Roman type</td> </tr> </tbody> </table>	Element	Style	Authors, date	Roman type	Article title (optional)	Roman type	Journal title	Italic type	Volume number	Bold type	Page numbers	Roman type
Element	Style												
Authors, date	Roman type												
Article title (optional)	Roman type												
Journal title	Italic type												
Volume number	Bold type												
Page numbers	Roman type												
<input checked="" type="checkbox"/>	<p>10.9. Up to ten authors may be given in a particular reference; where there are more than ten only the first should be given followed by “<i>et al.</i>”.</p>												
<input checked="" type="checkbox"/>	<p>10.10. Abbreviations of the names of periodicals used by IOP Publishing are usually the same as those given in British Standard BS 4148:1985. Alternately, ISO4 standard (e.g. <a href="https://blogs.ntu.edu.sg/lib-science/2015/08/28/a-tip-for-finding-the-iso-4-standard-abbreviation/">https://blogs.ntu.edu.sg/lib-science/2015/08/28/a-tip-for-finding-the-iso-4-standard-abbreviation/</a> or other sources) may be used. If an author is unsure of an abbreviation it is best to leave the title in full.</p>												

11. Acknowledgments	
<input checked="" type="checkbox"/>	11.1. Acknowledgment is provided in an <i>unnumbered</i> section immediately following the last numbered section of the paper.
12. Language	
<input checked="" type="checkbox"/>	12.1. This article is free from language errors (both typo-graphical and grammar errors).
13. Publication fees	
<input checked="" type="checkbox"/>	13.1. All authors agree to pay the publication charge for their submitted article (final format) if accepted for publication in the <i>Journal of Physics: Conference Series</i> . <b>The amount is 3,500 Baht which covers up to 4 pages plus 500 Baht extra for each additional page</b> (even there is only a single word on the extra page). <i>For instance, the publication charge for 6-pages article is 4,500 Baht (<math>3,500 + 2 \times 500 = 4,500</math> Baht).</i> Note that modifying the IOP's format (e.g. spacing, margin, font-size, etc.) to avoid the extra page charge will not be tolerated.
14. Declaration	
<input checked="" type="checkbox"/>	14.1. The author (to sign below) confirms that the provided information above is correct and has the consent of all co-authors to take full responsibilities of the submitted article (revision). The author also understand that falsified information will not be tolerated and will lead to REJECTION that cannot be appealed.

(NOTE THAT the IOP does very much concern about article format. In addition, since it is very time consuming to elaborate all the errors for each individual article, it does delay the publication on the whole issue. Therefore, if there still exists serious language and format errors in the revised article, we have no choice but to REJECT your article.)

Signed :  .....

Name Printed : Noparit Jinuntuya .....

Date : 18 August 2021 .....