

Author Guidelines for the Preparation of Contributions to Springer Computer Science Proceedings

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Headings. Headings should be capitalized (i.e., nouns, verbs, and all other words except articles, prepositions, and conjunctions should be set with an initial capital) and should, with the exception of the title, be aligned to the left. Only the first two levels of section headings should be numbered, as shown in Table 1. The respective font sizes are also given in Table 1. Kindly refrain from using “0” when numbering your section headings.

Table 1. Font sizes of headings. Table captions should always be positioned above the tables.

Heading level	Example	Font size and style
Title (centered)	Lecture Notes	14 point, bold
1 st -level heading	1 Introduction	12 point, bold
2 nd -level heading	2.1 Printing Area	10 point, bold
3 rd -level heading	Run-in Heading in Bold. Text follows	10 point, bold
4 th -level heading	<i>Lowest Level Heading.</i> Text follows	10 point, bold

Words joined by a hyphen are subject to a special rule. If the first word can stand alone, the second word should be capitalized.

Here are some examples of headings: “Criteria to Disprove Context-Freeness of Collage Languages”, “On Correcting the Intrusion of Tracing Non-deterministic Programs by Software”, “A User-Friendly and Extendable Data Distribution System”, “Multi-flip Networks: Parallelizing GenSAT”, “Self-determinations of Man”.

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It is essential that all illustrations are clear and legible. Vector graphics (rather than rasterized images) should be used for diagrams and schemas whenever possible. Please check that the lines in line drawings are not interrupted and have a constant width. Grids and details within the figures must be clearly legible and may not be written one on top of the other. Line drawings are to have a resolution of at least 800 dpi (preferably 1200 dpi). The lettering in figures should not use font sizes

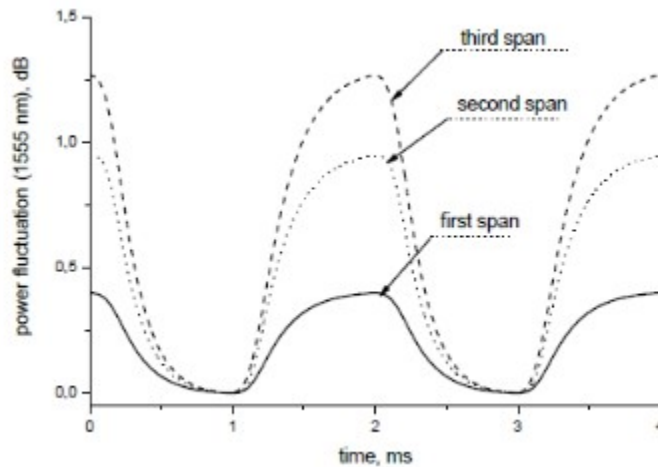


Fig. 1. Power distribution of channel at 1555 nm along the link of 383 km (Source: LNCS 5412, p. 323)

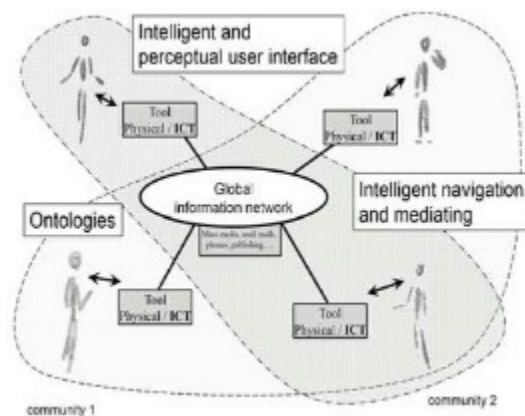


Fig. 2. Artifacts **empowered** by Artificial Intelligence (Source: LNCS 5640, p. 115)

smaller than 6 pt (~ 2 mm character height). Figures are to be numbered and to have a caption which should always be positioned *under* the figures, in contrast to the caption belonging to a table, which should always appear *above* the table.

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If screenshots are necessary, please make sure that the essential content is clear to the reader.

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$$x + y = z \qquad (1)$$

Equations should be punctuated in the same way as ordinary text but with a small space before the end punctuation mark.

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2.7 Program Code

Program listings or program commands in the text are normally set in typewriter font:

```

program Inflation (Output)
{Assuming annual inflation rates of 7%, 8%, and 10%,...
  years};
const MaxYears = 10;
var   Year: 0..MaxYears;
Factor1, Factor2, Factor3: Real;
begin
Year := 0;
Factor1 := 1.0; Factor2 := 1.0; Factor3 := 1.0;
WriteLn('Year 7% 8% 10%'); WriteLn; repeat
Year := Year + 1;
Factor1 := Factor1 * 1.07; Factor2 := Factor2 * 1.08;
Factor3 := Factor3 * 1.10;
WriteLn(Year:5,Factor1:7:3,Factor2:7:3, Factor3:7:3)
until Year = MaxYears end.
[Example of a computer program from Jensen K., Wirth
N.: Pascal User Manual and Report. Springer, New York
(1991)]

```

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References

- [1] Smith, T.F., Waterman, M.S.: Identification of Common Molecular Subsequences. *J. Mol. Biol.* 147, 195–197 (1981)
- [2] May, P., Ehrlich, H.C., Steinke, T.: ZIB Structure Prediction Pipeline: Composing a Complex Biological Workflow through Web Services. In: Nagel, W.E., Walter, W.V., Lehner, W. (eds.) *Euro-Par 2006. LNCS*, vol. 4128, pp. 1148–1158. Springer, Heidelberg (2006)
- [3] Foster, I., Kesselman, C.: *The Grid: Blueprint for a New Computing Infrastructure*. Morgan Kaufmann, San Francisco (1999)
- [4] Czajkowski, K., Fitzgerald, S., Foster, I., Kesselman, C.: Grid Information Services for Distributed Resource Sharing. In: 10th IEEE International Symposium on High Performance Distributed Computing, pp. 181–184. IEEE Press, New York (2001)
- [5] Foster, I., Kesselman, C., Nick, J., Tuecke, S.: *The Physiology of the Grid: an Open Grid Services Architecture for Distributed Systems Integration*. Technical report, Global Grid Forum (2002)
- [6] National Center for Biotechnology Information, <http://www.ncbi.nlm.nih.gov>

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