


# 1 Dummy title

2 **John Q. Public** ✉ 🏠 

3 Dummy University Computing Laboratory, [optional: Address], Country

4 My second affiliation, Country

5 **Joe**<sup>1</sup> ✉ 

6 Department of Informatics, Dummy College, [optional: Address], Country

---

## 7 Abstract

8 Lorem ipsum dolor sit amet, consectetur adipiscing elit. Praesent convallis orci arcu, eu mollis dolor.  
9 Aliquam eleifend suscipit lacinia. Maecenas quam mi, porta ut lacinia sed, convallis ac dui. Lorem  
10 ipsum dolor sit amet, consectetur adipiscing elit. Suspendisse potenti.

11 **2012 ACM Subject Classification** Replace `ccsdsc` macro with valid one

12 **Keywords and phrases** Dummy keyword

13 **Digital Object Identifier** 10.4230/LIPIcs.CVIT.2016.23

14 **Funding** *John Q. Public*: (Optional) author-specific funding acknowledgements

15 *Joe*: [funding]

16 **Acknowledgements** I want to thank ...

## 17 1 Typesetting instructions – Summary

18 LIPIcs is a series of open access high-quality conference proceedings across all fields in  
19 informatics established in cooperation with Schloss Dagstuhl. In order to do justice to the  
20 high scientific quality of the conferences that publish their proceedings in the LIPIcs series,  
21 which is ensured by the thorough review process of the respective events, we believe that  
22 LIPIcs proceedings must have an attractive and consistent layout matching the standard  
23 of the series. Moreover, the quality of the metadata, the typesetting and the layout must  
24 also meet the requirements of other external parties such as indexing service, DOI registry,  
25 funding agencies, among others. The guidelines contained in this document serve as the  
26 baseline for the authors, editors, and the publisher to create documents that meet as many  
27 different requirements as possible.

28 Please comply with the following instructions when preparing your article for a LIPIcs  
29 proceedings volume.

### 30 Minimum requirements

- 31 ■ Use `pdflatex` and an up-to-date  $\text{\LaTeX}$  system.
- 32 ■ Use further  $\text{\LaTeX}$  packages and custom made macros carefully and only if required.
- 33 ■ Use the provided sectioning macros: `\section`, `\subsection`, `\subsubsection`,  
34 `\paragraph`, `\paragraph*`, and `\subparagraph*`.
- 35 ■ Provide suitable graphics of at least 300dpi (preferably in PDF format).
- 36 ■ Use BibTeX and keep the standard style (`plainurl`) for the bibliography.
- 37 ■ Please try to keep the warnings log as small as possible. Avoid overfull `\hboxes` and any  
38 kind of warnings/errors with the referenced BibTeX entries.
- 39 ■ Use a spellchecker to correct typos.

---

<sup>1</sup> Optional footnote, e.g. to mark corresponding author



40 **Mandatory metadata macros**

41 Please set the values of the metadata macros carefully since the information parsed from  
 42 these macros will be passed to publication servers, catalogues and search engines. Avoid  
 43 placing macros inside the metadata macros. The following metadata macros/environments  
 44 are mandatory:

- 45 ■ `\title` and, in case of long titles, `\titlerunning`.
- 46 ■ `\author`, one for each author, even if two or more authors have the same affiliation.
- 47 ■ `\authorrunning` and `\Copyright` (concatenated author names)  
 48 The `\author` macros and the `\Copyright` macro should contain full author names (espe-  
 49 cially with regard to the first name), while `\authorrunning` should contain abbreviated  
 50 first names.
- 51 ■ `\ccsdesc` (ACM classification, see <https://www.acm.org/publications/class-2012>).
- 52 ■ `\keywords` (a comma-separated list of keywords).
- 53 ■ `\relatedversion` (if there is a related version, typically the “full version”); please make  
 54 sure to provide a persistent URL, e.g., at arXiv.
- 55 ■ `\begin{abstract}... \end{abstract}` .

56 **Please do not ...**

57 Generally speaking, please do not override the `lipics-v2021`-style defaults. To be more  
 58 specific, a short checklist also used by Dagstuhl Publishing during the final typesetting is  
 59 given below. In case of **non-compliance** with these rules Dagstuhl Publishing will remove  
 60 the corresponding parts of L<sup>A</sup>T<sub>E</sub>X code and **replace it with the `lipics-v2021` defaults**.  
 61 In serious cases, we may reject the L<sup>A</sup>T<sub>E</sub>X-source and expect the corresponding author to  
 62 revise the relevant parts.

- 63 ■ Do not use a different main font. (For example, the `times` package is forbidden.)
- 64 ■ Do not alter the spacing of the `lipics-v2021.cls` style file.
- 65 ■ Do not use `enumitem` and `paralist`. (The `enumerate` package is preloaded, so you can  
 66 use `\begin{enumerate}[a]` or the like.)
- 67 ■ Do not use “self-made” sectioning commands (e.g., `\noindent{\bf My Paragraph}`).
- 68 ■ Do not hide large text blocks using comments or `\iffalse ... \fi` constructions.
- 69 ■ Do not use conditional structures to include/exclude content. Instead, please provide  
 70 only the content that should be published – in one file – and nothing else.
- 71 ■ Do not wrap figures and tables with text. In particular, the package `wrapfig` is not  
 72 supported.
- 73 ■ Do not change the bibliography style. In particular, do not use author-year citations.  
 74 (The `natbib` package is not supported.)

75 This is only a summary containing the most relevant details. Please read the complete  
 76 document “LIPICs: Instructions for Authors and the `lipics-v2021` Class” for all details and  
 77 don’t hesitate to contact Dagstuhl Publishing (<mailto:publishing@dagstuhl.de>) in case  
 78 of questions or comments: [http://drops.dagstuhl.de/styles/lipics-v2021/  
 79 lipics-v2021-authors/lipics-v2021-authors-guidelines.pdf](http://drops.dagstuhl.de/styles/lipics-v2021/lipics-v2021-authors/lipics-v2021-authors-guidelines.pdf)

80 **2 Lorem ipsum dolor sit amet**

81 Lorem ipsum dolor sit amet, consectetur adipiscing elit [?]. Praesent convallis orci arcu, eu  
 82 mollis dolor. Aliquam eleifend suscipit lacinia. Maecenas quam mi, porta ut lacinia sed,  
 83 convallis ac dui. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Suspendisse potenti.  
 84 Donec eget odio et magna ullamcorper vehicula ut vitae libero. Maecenas lectus nulla, auctor

■ **Listing 1** Useless code.

```
for i:=maxint to 0 do
begin
  j:=square(root(i));
end;
```

85 nec varius ac, ultricies et turpis. Pellentesque id ante erat. In hac habitasse platea dictumst.  
86 Curabitur a scelerisque odio. Pellentesque elit risus, posuere quis elementum at, pellentesque  
87 ut diam. Quisque aliquam libero id mi imperdiet quis convallis turpis eleifend.

88 ► **Lemma 1** (Lorem ipsum). *Vestibulum sodales dolor et dui cursus iaculis. Nullam ullam-*  
89 *corper purus vel turpis lobortis eu tempus lorem semper. Proin facilisis gravida rutrum.*  
90 *Etiam sed sollicitudin lorem. Proin pellentesque risus at elit hendrerit pharetra. Integer at*  
91 *turpis varius libero rhoncus fermentum vitae vitae metus.*

92 **Proof.** Cras purus lorem, pulvinar et fermentum sagittis, suscipit quis magna.

93 **Just some paragraph within the proof.** Nam liber tempor cum soluta nobis eleifend option  
94 congue nihil imperdiet doming id quod mazim placerat facer possim assum. Lorem ipsum  
95 dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut  
96 laoreet dolore magna aliquam erat volutpat.

97 ▷ Claim 2. content...

98 Proof. content...

99 1. abc abc abc ◁

100 ◀

101 ► **Corollary 3** (Curabitur pulvinar, [?]). *Nam liber tempor cum soluta nobis eleifend option*  
102 *congue nihil imperdiet doming id quod mazim placerat facer possim assum. Lorem ipsum*  
103 *dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut*  
104 *laoreet dolore magna aliquam erat volutpat.*

105 ► **Proposition 4.** *This is a proposition*

106 Proposition 4 and Proposition 4 . . .

## 107 2.1 Curabitur dictum felis id sapien

108 Curabitur dictum Corollary 3 felis id sapien Corollary 3 mollis ut venenatis tortor feugiat.  
109 Curabitur sed velit diam. Integer aliquam, nunc ac egestas lacinia, nibh est vehicula nibh, ac  
110 auctor velit tellus non arcu. Vestibulum lacinia ipsum vitae nisi ultrices eget gravida turpis  
111 laoreet. Duis rutrum dapibus ornare. Nulla vehicula vulputate iaculis. Proin a consequat  
112 neque. Donec ut rutrum urna. Morbi scelerisque turpis sed elit sagittis eu scelerisque quam  
113 condimentum. Pellentesque habitant morbi tristique senectus et netus et malesuada fames  
114 ac turpis egestas. Aenean nec faucibus leo. Cras ut nisl odio, non tincidunt lorem. Integer  
115 purus ligula, venenatis et convallis lacinia, scelerisque at erat. Fusce risus libero, convallis at  
116 fermentum in, dignissim sed sem. Ut dapibus orci vitae nisl viverra nec adipiscing tortor  
117 condimentum [?]. Donec non suscipit lorem. Nam sit amet enim vitae nisl accumsan pretium.

118 **2.2 Proin ac fermentum augue**

119 Proin ac fermentum augue. Nullam bibendum enim sollicitudin tellus egestas lacinia euismod  
 120 orci mollis. Nulla facilisi. Vivamus volutpat venenatis sapien, vitae feugiat arcu fringilla ac.  
 121 Mauris sapien tortor, sagittis eget auctor at, vulputate pharetra magna. Sed congue, dui  
 122 nec vulputate convallis, sem nunc adipiscing dui, vel venenatis mauris sem in dui. Praesent  
 123 a pretium quam. Mauris non mauris sit amet eros rutrum aliquam id ut sapien. Nulla  
 124 aliquet fringilla sagittis. Pellentesque eu metus posuere nunc tincidunt dignissim in tempor  
 125 dolor. Nulla cursus aliquet enim. Cras sapien risus, accumsan eu cursus ut, commodo vel  
 126 velit. Praesent aliquet consectetur ligula, vitae iaculis ligula interdum vel. Integer faucibus  
 127 faucibus felis.

- 128 ■ Ut vitae diam augue.
- 129 ■ Integer lacus ante, pellentesque sed sollicitudin et, pulvinar adipiscing sem.
- 130 ■ Maecenas facilisis, leo quis tincidunt egestas, magna ipsum condimentum orci, vitae  
 131 facilisis nibh turpis et elit.

132 ► Remark 5. content...

133 **3 Pellentesque quis tortor**

134 Nec urna malesuada sollicitudin. Nulla facilisi. Vivamus aliquam tempus ligula eget ornare.  
 135 Praesent eget magna ut turpis mattis cursus. Aliquam vel condimentum orci. Nunc congue,  
 136 libero in gravida convallis [?], orci nibh sodales quam, id egestas felis mi nec nisi. Suspendisse  
 137 tincidunt, est ac vestibulum posuere, justo odio bibendum urna, rutrum bibendum dolor sem  
 138 nec tellus.

139 ► **Lemma 6** (Quisque blandit tempus nunc). *Sed interdum nisl pretium non. Mauris sodales  
 140 consequat risus vel consectetur. Aliquam erat volutpat. Nunc sed sapien ligula. Proin faucibus  
 141 sapien luctus nisl feugiat convallis faucibus elit cursus. Nunc vestibulum nunc ac massa  
 142 pretium pharetra. Nulla facilisis turpis id augue venenatis blandit. Cum sociis natoque  
 143 penatibus et magnis dis parturient montes, nascetur ridiculus mus.*

144 Fusce eu leo nisi. Cras eget orci neque, eleifend dapibus felis. Duis et leo dui. Nam  
 145 vulputate, velit et laoreet porttitor, quam arcu facilisis dui, sed malesuada risus massa sit  
 146 amet neque.

147 **4 Morbi eros magna**

148 Morbi eros magna, vestibulum non posuere non, porta eu quam. Maecenas vitae orci risus,  
 149 eget imperdiet mauris. Donec massa mauris, pellentesque vel lobortis eu, molestie ac turpis.  
 150 Sed condimentum convallis dolor, a dignissim est ultrices eu. Donec consectetur volutpat  
 151 eros, et ornare dui ultricies id. Vivamus eu augue eget dolor euismod ultrices et sit amet nisi.  
 152 Vivamus malesuada leo ac leo ullamcorper tempor. Donec justo mi, tempor vitae aliquet non,  
 153 faucibus eu lacus. Donec dictum gravida neque, non porta turpis imperdiet eget. Curabitur  
 154 quis euismod ligula.

155 **A Styles of lists, enumerations, and descriptions**

156 List of different predefined enumeration styles:

```

157 ■ \begin{itemize}...\end{itemize}
158 ■ ...
159 ■ ...

160 1. \begin{enumerate}...\end{enumerate}
161 2. ...
162 3. ...

163 (a) \begin{alphaenumerate}...\end{alphaenumerate}
164 (b) ...
165 (c) ...

166 (i) \begin{romanenumerate}...\end{romanenumerate}
167 (ii) ...
168 (iii) ...

169 (1) \begin{bracketenumerate}...\end{bracketenumerate}
170 (2) ...
171 (3) ...

172 Description 1 \begin{description} \item[Description 1] ... \end{description}
173 Description 2 Fusce eu leo nisi. Cras eget orci neque, eleifend dapibus felis. Duis et leo dui.
174 Nam vulputate, velit et laoreet porttitor, quam arcu facilisis dui, sed malesuada risus
175 massa sit amet neque.
176 Description 3 ...

177 Proposition 10 and Proposition 10 ...

178 B Theorem-like environments

179 List of different predefined enumeration styles:

180 ► Theorem 7. Fusce eu leo nisi. Cras eget orci neque, eleifend dapibus felis. Duis et leo dui.
181 Nam vulputate, velit et laoreet porttitor, quam arcu facilisis dui, sed malesuada risus massa
182 sit amet neque.

183 ► Lemma 8. Fusce eu leo nisi. Cras eget orci neque, eleifend dapibus felis. Duis et leo dui.
184 Nam vulputate, velit et laoreet porttitor, quam arcu facilisis dui, sed malesuada risus massa
185 sit amet neque.

186 ► Corollary 9. Fusce eu leo nisi. Cras eget orci neque, eleifend dapibus felis. Duis et leo dui.
187 Nam vulputate, velit et laoreet porttitor, quam arcu facilisis dui, sed malesuada risus massa
188 sit amet neque.

189 ► Proposition 10. Fusce eu leo nisi. Cras eget orci neque, eleifend dapibus felis. Duis et leo
190 dui. Nam vulputate, velit et laoreet porttitor, quam arcu facilisis dui, sed malesuada risus
191 massa sit amet neque.

192 ► Conjecture 11. Fusce eu leo nisi. Cras eget orci neque, eleifend dapibus felis. Duis et leo
193 dui. Nam vulputate, velit et laoreet porttitor, quam arcu facilisis dui, sed malesuada risus
194 massa sit amet neque.

```

## 23:6 Dummy short title

195 ► **Observation 12.** *Fusce eu leo nisi. Cras eget orci neque, eleifend dapibus felis. Duis et*  
196 *leo dui. Nam vulputate, velit et laoreet porttitor, quam arcu facilisis dui, sed malesuada risus*  
197 *massa sit amet neque.*

198 ► **Exercise 13.** *Fusce eu leo nisi. Cras eget orci neque, eleifend dapibus felis. Duis et leo*  
199 *dui. Nam vulputate, velit et laoreet porttitor, quam arcu facilisis dui, sed malesuada risus*  
200 *massa sit amet neque.*

201 ► **Definition 14.** *Fusce eu leo nisi. Cras eget orci neque, eleifend dapibus felis. Duis et leo*  
202 *dui. Nam vulputate, velit et laoreet porttitor, quam arcu facilisis dui, sed malesuada risus*  
203 *massa sit amet neque.*

204 ► **Example 15.** *Fusce eu leo nisi. Cras eget orci neque, eleifend dapibus felis. Duis et leo*  
205 *dui. Nam vulputate, velit et laoreet porttitor, quam arcu facilisis dui, sed malesuada risus*  
206 *massa sit amet neque.*

207 ► **Note 16.** *Fusce eu leo nisi. Cras eget orci neque, eleifend dapibus felis. Duis et leo dui.*  
208 *Nam vulputate, velit et laoreet porttitor, quam arcu facilisis dui, sed malesuada risus massa*  
209 *sit amet neque.*

210 ► **Note.** *Fusce eu leo nisi. Cras eget orci neque, eleifend dapibus felis. Duis et leo dui. Nam*  
211 *vulputate, velit et laoreet porttitor, quam arcu facilisis dui, sed malesuada risus massa sit*  
212 *amet neque.*

213 ► **Remark 17.** *Fusce eu leo nisi. Cras eget orci neque, eleifend dapibus felis. Duis et leo dui.*  
214 *Nam vulputate, velit et laoreet porttitor, quam arcu facilisis dui, sed malesuada risus massa*  
215 *sit amet neque.*

216 ► **Remark.** *Fusce eu leo nisi. Cras eget orci neque, eleifend dapibus felis. Duis et leo dui.*  
217 *Nam vulputate, velit et laoreet porttitor, quam arcu facilisis dui, sed malesuada risus massa*  
218 *sit amet neque.*

219 ▷ **Claim 18.** *Fusce eu leo nisi. Cras eget orci neque, eleifend dapibus felis. Duis et leo dui.*  
220 *Nam vulputate, velit et laoreet porttitor, quam arcu facilisis dui, sed malesuada risus massa*  
221 *sit amet neque.*

222 ▷ **Claim.** *Fusce eu leo nisi. Cras eget orci neque, eleifend dapibus felis. Duis et leo dui.*  
223 *Nam vulputate, velit et laoreet porttitor, quam arcu facilisis dui, sed malesuada risus massa*  
224 *sit amet neque.*

225 **Proof.** *Fusce eu leo nisi. Cras eget orci neque, eleifend dapibus felis. Duis et leo dui. Nam*  
226 *vulputate, velit et laoreet porttitor, quam arcu facilisis dui, sed malesuada risus massa sit*  
227 *amet neque.* ◀

228 **Proof.** *Fusce eu leo nisi. Cras eget orci neque, eleifend dapibus felis. Duis et leo dui. Nam*  
229 *vulputate, velit et laoreet porttitor, quam arcu facilisis dui, sed malesuada risus massa sit*  
230 *amet neque.* ◀