

## SAMPLE PAPER FOR BCP

ANNA KOWALSKA

*Institute of Mathematics, Polish Academy of Sciences, 00-656 Warszawa, Poland*  
*ORCID: 0000-0002-2345-6789 E-mail: kowalska@impan.gov.pl*

RYSZARD ŁABĘCKI

*Institute of Mathematics, A. Mickiewicz University, 61-614 Poznań, Poland*  
*ORCID: 0000-0003-2346-9876 E-mail: labecki@amu.edu.pl*

**Abstract.** This is a sample paper for Banach Center Publications.

**1. Introduction.** Papers for Banach Center Publications should be prepared using the `bcp.cls` style file. In case of any problems contact `publ@impan.pl`. The publisher will create page proofs for final review by the author.

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Put all acknowledgments, including those concerning grants, into an unnumbered “Acknowledgments” subsection just before the references.

In the running heads, the authors’ first names are replaced by initials, and the titles are strongly abbreviated. Provide an abbreviation of the title of no more than 40 characters. Write “A. Kowalska et al.” in the running head if there are three authors or more.

**2. Theorems.** The statements of theorems, propositions etc. are set in italics. In definitions, only the term being defined is emphasized. Remarks and examples are set in Roman type.

DEFINITION 2.1. A system  $S$  is said to be *self-extensional* if

- (i) first item,

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The paper is in final form and no version of it will be published elsewhere.

- (ii) second item,
- (iii) third item.

THEOREM 2.2 (Identity Principle, see also [2, Theorem 5]). *If  $A = B$ , then*

$$C = D.$$

*Proof.* Observe that

$$\begin{aligned} \left(\frac{1}{2}(y + \text{length}_i A_i)\right)^2 &= \begin{pmatrix} a + b \\ c - d \end{pmatrix} \\ &\quad + \left(\prod_{i=1}^n A_i\right)^2 + \left(\frac{u}{v}\right)^n \\ &\stackrel{\alpha}{=} \begin{cases} \sqrt[3]{2/\sin x} & \text{if } x \in (0, \pi), \\ 0 & \text{otherwise.} \end{cases} \end{aligned} \tag{1}$$

Now apply induction on  $n$  to (1). ■

REMARK. Theorem 2.2 was independently proved in [3].

MAIN THEOREM 2.3. *Here comes the statement of a numbered theorem with a fancy name.*

For many examples of codes of multiline formulas, see

<https://www.impan.pl/en/publishing-house/for-authors>.

The `eqnarray` construction leads to well-known mistakes—if you have learnt it, just forget it.

Do not leave “overflows” in formulas; if the formula is too wide, break it yourself into lines or, e.g., shorten it by introducing some symbols.

Do not re-invent L<sup>A</sup>T<sub>E</sub>X; before using your own construction or creating a new symbol look up Grätzer [1]—most probably, your intended construction or symbol is already there.

Add small spaces `\`, only exceptionally, e.g. before differentials.

**3. Sectioning.** Here is an example of a subsection:

**3.1. A subheading.** This paragraph is included only to illustrate the appearance of a subheading.

**3.1.1. A subsubheading.** This paragraph illustrates a subsubheading.

**4. Figures.** Preferably, figures should be prepared as pdf, jpg or eps files. All figures will be printed black and white; colours will only appear in the online version.

Avoid very thin lines and very small lettering.

Check whether all fonts used are embedded.

Fig. 1. A figure caption

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### References

- [1] G. Grätzer, *More Math into L<sup>A</sup>T<sub>E</sub>X*, 4th ed., Springer, Berlin, 2007.
- [2] R. Hill and A. Dow, *A ground-breaking achievement*, J. Differential Equations 15 (1982), 197–211.
- [3] J. Kowalski, *A very interesting paper*, in: Algebra, Analysis and Beyond (Nowhere, 1973), E. Fox et al. (eds.), Lecture Notes in Math. 867, Springer, Berlin, 1974, 115–124.
- [4] A. S. Novikov, *Another fascinating article*, Uspekhi Mat. Nauk 23 (1980), no. 3, 112–134 (in Russian); English transl.: Russian Math. Surveys 23 (1980), 572–595.
- [5] B. Russell, *A new theorem*, arXiv:2012.9876 (2020).