

# A sample paper for IMPAN journals

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## Abstract

A template for articles in IMPAN journals in the `article` style.  
Using `pdflatex` is strongly preferred.

## 1 Introduction

You can use this file as a template when submitting your paper to one of the IMPAN journals (except *Dissertationes Mathematicae* and Banach Center Publications, for which style files exist).

The format of this file is **not** the exact final printed format (for example, the latter is scaled down, and line breaks will most often be different), but it is convenient for editing purposes.

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2010 *Mathematics Subject Classification*: Primary XXXX; Secondary YYYY.  
*Key words and phrases*: aaaa, bbbb, cccc.

## 2 Theorems etc.

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  $S \in B$ .

**Problem 2.2.** *Is  $A + B = C$  true?*

**Theorem 2.3** (Identity Principle, see also [HD82, Theorem 5]). *If  $A = B$ , then the following conditions are equivalent:*

- (i) *first item,*
- (ii) *second item,*
- (iii) *third item.*

*Proof.* We only prove (i) $\Rightarrow$ (ii). Observe that

$$(2.1) \quad \left(\frac{1}{2}(\mathcal{F}^3\mathbb{S}^b\mathbf{G}_1 + \text{length } \mathcal{F}^{a+i}\mathbb{S}^2\mathbf{G}_4)\right)^2 = \begin{pmatrix} a+b \\ c-d \end{pmatrix} + \left(\prod_{i=1}^n A_i\right)^2 + \left(\frac{u}{v}\right)^n \\ \stackrel{\alpha}{=} \begin{cases} \sqrt[3]{2/\sin x} & \text{if } x \in (0, \pi), \\ 0 & \text{otherwise.} \end{cases}$$

Now apply induction on  $n$  to (2.1). □

**Remark.** Theorem 2.3 was independently proved in [K74].

**Main Theorem 2.4.** *Here comes the statement of a numbered theorem with a fancy name.*

Note that formulas in IMPAN journals are left-numbered. 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 [G07]—most probably, your intended construction or symbol is already there.

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

### 3 Figures

If you are including figures created outside L<sup>A</sup>T<sub>E</sub>X, they 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. If your original figures are coloured, check their black-and-white printouts; you may wish to change (some of) the colours, or use shades of grey, to make some distinctions more visible.

Avoid very thin lines, and check whether all fonts used are embedded.

Remember that sometimes figures have to be scaled, and then the lettering is scaled too; therefore, very small lettering should be avoided.

Figure 1: A figure caption

### Acknowledgements

Place all thanks and grant acknowledgements here.

### References

- [G07] G. Grätzer, *More Math into L<sup>A</sup>T<sub>E</sub>X*, 4th ed., Springer, Berlin, 2007.
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- [N80] 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.
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