
Editorial comments

Barbara Beeton

TUG 2019 sponsors

In an effort to rush the proceedings issue to the printer, the recognition of sponsors was overlooked. The omitted information appears in this issue on pages 280–282. We are most appreciative of their support, and apologize for the omission.

Kerning between lowercase+uppercase

In the Computer Modern fonts, no kerning is defined between any lowercase letter and an adjacent capital. This combination is rare (probably nonexistent) in ordinary English words, but may occur in proper names and its frequency is growing in trademarked names and CamelCase programming notation.

A question on `tex.stackexchange` noted that the combination “fF” (the “femto-farads” unit of capacitance) seems to be typeset strangely or incorrectly.¹ Indeed, this almost appears to be a ligature, which is certainly incorrect.

The unfortunate crunching together of the two members of such a combination can be remedied manually in several ways in math mode (e.g., inside `\mathrm` in \LaTeX):

- inserting an italic correction: `f\{/F → fF`;
- inserting a zero kern: `f\kern0pt F → fF`;
- inserting an empty group: `f{ }F → fF`.

In math mode, they all result in \TeX inserting the italic correction value for ‘f’ (which is nonzero in the `cmr` fonts). In text mode, it is necessary to explicitly insert the italic correction with `\/`.

The last of these, empty braces, can disappear if the combination is in a string that is a moving argument (e.g., an index term) when saved and set later in a secondary location.

Differential “d”

The question “What’s the proper way to typeset a differential operator?” persists. Is it an upright “d” (as specified by ISO 80000-2:2009 and its predecessor ISO 31-11 (1992)), or italic, as it appears in a couple centuries worth of math journals and books?

The question was already raised in *TUGboat*, in the 1997 article “Typesetting mathematics for science and technology according to ISO 31/XI”² by Claudio Beccari. That ISO standard mandates the upright form. But that standard was devised by engineers and physicists; no mathematicians were involved.

¹ <https://tex.stackexchange.com/q/505607>

² *TUGboat* 18(1), pp. 39–48,
<https://tug.org/TUGboat/tb18-1/tb54becc.pdf>

A question in the History of Science and Mathematics thread of StackExchange³ has brought the matter up again. The supporting detail is rather extensive, and has caused me to search further. So, since I’m still investigating, this note is not the final word; look for a dedicated article in the next issue.

Bibliographic archives in $\text{BIB}\TeX$ form

Although in some ways $\text{BIB}\TeX$ has been overshadowed by $\text{BIB}\LaTeX$, a monumental body of bibliographic information in $\text{BIB}\TeX$ form exists in curated and normalized databases and archives.

The BibNet Project archive at the University of Utah⁴ is managed by Nelson Beebe. This archive continues to grow, and the sibling \TeX Users Group bibliography archive now holds $\text{BIB}\TeX$ data for nearly 900 journals and about 90 subject-specific bibliographies. (This includes a complete `.bib` file for all issues of *TUGboat*.) The BibNet Project archive holds additional subject-specific material and extensive bibliographies of important scientists in many fields of computing and numerical analysis.

In addition to the bibliographic data, many tools for managing such data are available as well, with extensive documentation⁵ describing the $\text{BIB}\TeX$ program, tools, and best practices for writing $\text{BIB}\TeX$ entries.

The entire content of this archive — both data and tools — is freely available.

Nelson has presented talks at TUG meetings and written articles on the tools (and many other \TeX topics) for *TUGboat*; see the cumulative *TUGboat* contents online.⁶

Other freely available bibliographies for computer science are located at the University of Karlsruhe⁷ and the University of Trier.⁸

The MathSciNet⁹ service of the American Mathematical Society holds bibliographic information and reviews for about 4 million books and articles dating from the 1800s, and is available to users at institutional subscribers to the service.

◇ Barbara Beeton
<https://tug.org/TUGboat>
tugboat (at) tug dot org

³ *dy/dx* versus dy/dx ,
<https://hsm.stackexchange.com/q/6727>

⁴ <http://www.math.utah.edu/pub/bibnet>
<http://www.math.utah.edu/pub/tex/bib>

⁵ <http://www.math.utah.edu/pub/bibnet/bibtex-info.html>

⁶ <https://tug.org/TUGboat/Contents/listauthor.html#Beebe,Nelson>

⁷ <https://liinwww.ira.uka.de/bibliography/>

⁸ <https://dblp.uni-trier.de/>

⁹ <https://mathscinet.ams.org/mathscinet/index.html>