

The ‘Boldtensors’ style file

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June 29, 2007

The L^AT_EX style file ‘Boldtensors’ provides within standard `\mathversion{normal}` (the `\unboldmath` environment) latin and greek characters in bold and blackboard layout. With the style option `nabla` also the Nabla operator ∇ is available in bold layout. For the unit tensor and null tensor a bold ‘**1**’ and bold ‘**0**’ are provided. A second option `differential` let the character ‘d’ behave like an ordinary operator in roman layout.

The major advantage is that subscripts, indices and accents can be used without any layout problems. Any index or subscript will be placed nearby on the bold/blackboard symbol accordingly to the layout/formatting rules defined in the used fonts.

The usage is simple `$\mathbf{T}` and `$$\mathbb{R}`. The first just prints a bold \mathbf{T} which denotes a tensor independent from its components T_{ij} within an arbitrary chosen orthonormal base. The second example shows a blackboard bold \mathbb{R} for the real numbers sometimes written as `$$\mathrm{I}\!R` but looks like ‘ \mathbb{R} ’.

Some more examples:

```
\documentclass{article}
\usepackage{amsmath}
\usepackage[differential]{boldtensors}
\begin{document}
\begin{math}
ds^2 = g_{\alpha\beta}dx^{\alpha}dx^{\beta}
\end{math}
\end{document}
```

$$ds^2 = g_{\alpha\beta}dx^{\alpha}dx^{\beta}$$

```
\documentclass{article}
\usepackage{amsmath}
\usepackage{boldtensors}
\begin{document}
\begin{math}
\tilde{G} = \frac{8 \pi G}{c^4} \tilde{T}
\end{math}
\end{document}
```

$$\mathbf{G} = \frac{8\pi G}{c^4} \mathbf{T}$$