## The isonums package\*

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2007/12/31

Adapted to handle English formatted numbers: Luis Rivera, jlrn77@gmail.com

This package provides the macros

\ZifferAn (equivalent with \ZifferPunktAn \ZifferStrichAn )
\ZifferAus (equivalent with \ZifferPunktAus\ZifferStrichAus)
\ZifferPunktAn
\ZifferPunktAus
\ZifferStrichAn
\ZifferStrichAus

If \ZifferAn was used, then in numbers in math-mode the following happens:

- '.' is used as a 'one-thousand separator' as common in Germany
- ',' is used as a decimal separator as common in Germany
- '--' generates a -- with better spacing (e.g. in 1.000,--)

You may still use the symbols '.' ', ' and '-' in other context in math mode.

The first two conversions are switched on by default, the last conversion has to be switched on explicitly (this has been changed in v2.1): You may switch on/off the conversions with

```
\ZifferPunktAn/\ZifferPunktAus (for the first two conversions)
respectively
\ZifferStrichAn/\ZifferStrichAus (for the last conversion).
```

<sup>\*</sup>This manual corresponds to isonums v1.0, dated 2007/12/31, based on ziffer v2.2.

The reason why the last conversion is not on by default (and why it might be necessary to [temporarily] switch off a conversion) is that certain packages (in particular, newer versions of **amsmath**) cause problems with it.

There were some discussions which should be the correct output of the above conversions (in particular, of '--'). If you do not like my choice: You may customize (i. e. redefine) the macros **\ZifferLeer** and **\ZifferStrich** after loading the package to produce the 'one-thousand separator' respectively the '--'.

All above command-names are in German, because I had expected that this package is only needed for German texts. Meanwhile, I learned that also other countries use this strange convention for numbers. However, for downward compatibility, I decided to keep the name conventions anyway (after all, the name of the package is in German anyway).

The extension options (euro, anglo) define the input format, so that all numbers in math mode are displayed in ISO-31-0 format, regardless of input format. The commands \EuroZiffer and \AngloZiffer make local changes within the document body. I wrote these extensions as I use the decimal point consistently and I found convenient to make conversions to all numbers simply by adjusting a command line in the whole document.— Luis.