# Citations with PDF tooltips

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This paper describes package xcpdftips version 1.0 from 2019/03/10

#### 1 Introduction

This package allows one to be able to do natbib citations with PDF tooltips.

#### 2 Invoking the Package

The macros in this package are included in the main document with the \usepackage command of LATFX  $2_{\varepsilon}$ ,

```
\documentclass[..]{...}
\usepackage{xcpdftips}
```

## 3 Usage

This package must be used with BIBTEX and natbib, not with a hand-written thebibliography environment. More precisely, there must be a .bbl file external to the LATEX file; whether this is written by hand or by BIBTEX is unimportant.

\xpdfcite

This is a replacement for natbib's \cite macro. Usage is the same:

```
\xpdfcite{\langle key(s) \rangle}
```

Similarly to \cite, the command \xpdfcite may take one or two optional arguments to add some text before and after the citation.

It is also possible to replace \cite:

```
\usepackage{xcpdftips}
\let\cite\xpdfcite \robustify{\cite}
```

The last command  $\ \$  is needed if you wish to use  $\$  instance, in captions.

#### 4 Caveats

The xcpdftips package will work with natbib with its native \bibitem format, and with standard LATEX. Nothing else can be guaranteed. It will also work with url package.

### 5 Options with docstrip

The source .dtx file is meant to be processed with docstrip, for which a number of options are available:

package to produce a .sty package file with most comments removed;

driver to produce a driver .drv file that will print out the documentation under  $\LaTeX$  2.09.

The source file xcpdftips.dtx is itself a driver file and can be processed directly by  $\LaTeX 2\varepsilon$ .

#### 6 The Coding

30 \ExplSyntaxOff

31

This section presents and explains the actual coding of the macros. It is nested between %<\*package> and %</package>, which are indicators to docstrip that this coding belongs to the package file.

\XC@enumeratetips

The macro \XC@enumeratetips gets bibentry for each key from the list of citations. The output is stored into \XC@tips, which can be directly used as a tooltip text in \pdfttooltip.

```
1 \langle *package \rangle
 3 \newsavebox{\XC@keynum} % Temp box for getting key numbers using \citenum{}
 4
 5 \ExplSyntaxOn
 6
 7 \NewDocumentCommand{ \XC@enumeratetips }%
 8 { > { \SplitList , } m }%
 9 {%
       \global\undef\XC@tips%
10
        \global\undef\XC@keys%
11
        \tl_map_inline:nn {#1}%
12
13
        {%
           \ifx\XC@tips\undefined%
14
15
               \global\def\XC@keys{}%
               \sbox\XC@keynum{\citenum{##1}}%
16
               \expandafter\xdef\csname XC@k@##1\@extra@b@citeb\endcsname{\NAT@num}%
17
               \xappto{\XC@keys}{\NAT@num}%
18
               \global\def\XC@tips{}%
19
               \gappto{\XC@tips}{[\textbf{\@nameuse{XC@k@##1\@extra@b@citeb}}]\ {\@nameuse{BR@r@##1\@extra@b@citeb}}]\ {\@nameuse{BR@r@##1\@extra@b@citeb}}
20
21
            \else%
22
               \sbox\XC@keynum{\citenum{##1}}%
               \expandafter\xdef\csname XC@k@##1\@extra@b@citeb\endcsname{\NAT@num}%
24
               \xappto{\XC@keys}{,\NAT@num}%
               \gappto{\XC@tips}{,\textCR[\textbf{\@nameuse{XC@k@##1\@extra@b@citeb}}]\ {\@nameuse{BR@:
25
26
       }%
27
28 }
```

```
This commands sets the author used for pdf comments (default: ).
            \xcsetauthor
                                                                     33 \gdef\XC@opt@author{{}}
                                                                     34 \mbox{ } [1] {\gdef\XC@opt@author{#1}}
                                                                   This commands sets the markup used for pdf comments (default: Underline).
            \xcsetmarkup
                                                                     37 \gdef\XC@opt@markup{Underline}
                                                                     38 \newcommand{\xcsetmarkup}[1]{\gdef\XC@opt@markup{#1}}
                \xcsetcolor This commands sets the color used for pdf comments (default: yellow).
                                                                     41 \gdef\XC@opt@color{1 1 0}
                                                                     42 \newcommand{\xcsetcolor}[1]{\gdef\XC@opt@color{#1}}
\XC@opt@opacity This commands sets the opacity used for pdf comments (default: 0).
                                                                     45 \gdef\XC@opt@opacity{0}
                                                                     46 \end{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\command{\c
                    \XC@citetp This macro is in fact \xpdfcite.
                                                                     It is a wrapper for \XC@citetp to handle variable number of arguments.
                                                                     49 \end{XC@citetp{\cifnextchar[{\XC@citetp}{\XC@citetp[]}}}
                                                                  This macro is called from \xpdfcite.
                \XC@@citetp
                                                                     It is a wrapper for \XC@citex to handle variable number of arguments.
                                                                     52 \newcommand\XC@@citetp{}
                                                                     54 \ensuremath{\texttt{MC@citex[][\#1]}} \\ \ensuremath{\texttt{MC@citex[][\#1]
                        \XC@citex This is an internal macro that does the job of \xpdfcite. It combines \citep
                                                                     with \pdftooltip and \pdfmarkupcomment.
                                                                     57 \newcommand\XC@citex{}
                                                                     59 \def\XC@citex[#1][#2]#3%
                                                                     60 {%{\protect\NoHyper%
                                                                     61
                                                                                              \ifx\ocgtooltip\undefined%
                                                                                                      \XC@enumeratetips{#3}%
                                                                     62
                                                                                                       \pdftooltip{\XC@oldcite[#1][#2]{#3}}{\XC@tips}%
                                                                     63
                                                                                                      \pdfmarkupcomment[%
                                                                     64
                                                                                                            author=\XC@opt@author,%
                                                                     65
                                                                                                             markup=\XC@opt@markup,%
                                                                     66
                                                                                                              color=\XC@opt@color,%
                                                                     67
```

```
opacity=\XC@opt@opacity,%
          68
                 ]{\vphantom{.}}{\XC@tips}%
          69
                \else%
          70
                  \let\textCR\par%
          71
          72
                  \XC@enumeratetips{#3}%
          73
                  \ocgtooltip%
                    74
          75
                fi%
          76
             }%\protect\endNoHyper}}
          77
          78
          79 \ensuremath{\mbox{\sc Normalize}}\xspace % Save \citep (in the case if it becomes redefined)
\makeboxpdfcite A wrapper for the combined \pdftooltip and \citep.
          It has the same syntax as \citep.
          82 \left( XC@citetp \right)
          83 \robustify{\xpdfcite}
          85 \AtBeginDocument{\nobibliography*} % Necessary to get bibentries.
```