```
    \@ifundefined{SK@@label}{%
    }{%
      \global\NR@showkeystrue
    }%
  \endgroup
}{}
```

`\label@hook`

```
\providecommand*{\label@hook}{}
\ltx@GlobalAppendToMacro{\label@hook}{%
  \NR@sanitize@labelname
}
```

`\label`

```
\def\label#1{%
  \@bsphack
  \begingroup
    \def\label@name{#1}%
    \label@hook
    \protected@write\@auxout{}{%
      \string\newlabel{#1}{%
        {\@currentlabel}%
        {\thepage}%
        {\@currentlabelname}%
        {\@currentHref}{}%
      }%
    }%
  \endgroup
  \@esphack
}%
\ifNR@showkeys
  \def\label#1{%
    \@bsphack
    \SK@\SK@@label{#1}%
    \begingroup
      \def\label@name{#1}%
      \label@hook
      \protected@write\@auxout{}{%
        \string\newlabel{#1}{%
          {\@currentlabel}%
          {\thepage}%
          {\@currentlabelname}%
          {\@currentHref}{}%
        }%
      }%
    \endgroup
    \@esphack
  }%
\fi
```

`\ltx@label`

```
\let\ltx@label\label
```

Needed for the *subeqnarray* package.

```
}
```

First the numbered sections. While we are about it, put in a useful section formatting macro.

\NR@sect

```
\let\NR@sect\@sect
\newcounter{section@level}
```

\@sect

```
\@ifundefined{NR@nopatch@sectioning}
 {\def\@sect#1#2#3#4#5#6[#7]#8{%
   \setcounter{section@level}{#2}%
   \NR@gettitle{#7}%
   \NR@sect{#1}{#2}{#3}{#4}{#5}{#6}[{#7}]{\Sectionformat{#8}{#2}}%
 }}{}
```

and now the unnumbered ones

\NR@ssect

```
\let\NR@ssect\@ssect
```

\@ssect

```
\@ifundefined{NR@nopatch@sectioning}
 {\def\@ssect#1#2#3#4#5{%
   \NR@gettitle{#5}%
   \NR@ssect{#1}{#2}{#3}{#4}{\Sectionformat{#5}{#1}}%
 }}{}
```

Support for class memoir.

```
\@ifundefined{NR@nopatch@sectioning}
 {\ltx@IfUndefined{ifheadnameref}{%
  }{%
    \ltx@IfUndefined{M@sect}{%
    }{%
      \let\NRorg@M@sect\M@sect
      \def\M@sect#1#2#3#4#5#6[#7][#8]{%
        \ifheadnameref
          \NR@gettitle{#8}%
        \else
          \NR@gettitle{#7}%
        \fi
        \NRorg@M@sect{#1}{#2}{#3}{#4}{#5}{#6}[{#7}][{#8}]%
      }%
    }%
  }}{}
```

Parts and chapters are treated differently. sigh. `\@part` and `\@spart` are `\long` because of class memoir.

```
\let\NR@part\@part
\let\NR@spart\@spart
\let\NR@chapter\@chapter
\let\NR@schapter\@schapter
```

```
\@ifundefined{NR@nopatch@sectioning}
 {%
  \long\def\@part[#1]#2{%
    \NR@gettitle{#1}%
    \NR@part[{#1}]{#2}%
  }
  \long\def\@spart#1{%
    \NR@gettitle{#1}%
    \NR@spart{#1}%
  }
  \def\@chapter[#1]#2{%
    \NR@gettitle{#1}%
    \NR@chapter[{#1}]{#2}%
  }
  \@ifclassloaded{memoir}{%
    \ltx@IfUndefined{ifheadnameref}{%
    }{%
      \def\@chapter[#1]#2{%
        \ltx@IfUndefined{ch@pt@c}{%
          \NR@gettitle{#1}%
        }{%
          \ifx\ch@pt@c\ltx@empty
            \NR@gettitle{#2}%
          \else
            \def\NR@temp{#1}%
            \ifx\NR@temp\ltx@empty
              \expandafter\NR@gettitle\expandafter{\ch@pt@c}%
            \else
              \ifheadnameref
                \NR@gettitle{#1}%
              \else
                \expandafter\NR@gettitle\expandafter{\ch@pt@c}%
              \fi
            \fi
          \fi
        }%
        \NR@chapter[{#1}]{#2}%
      }%
    }%
  }{}
  \def\@schapter#1{%
    \NR@gettitle{#1}%
    \NR@schapter{#1}%
  }}{}
```

Captions

```
\AtBeginDocument{%
  \@ifpackageloaded{hyperref}{}
  {%
    \@ifundefined{NR@nopatch@caption}
     {\let\NR@@caption\@caption
      \long\def\@caption#1[#2]{%
      \NR@gettitle{#2}%
      \NR@@caption{#1}[{#2}]%
```

```
      }}%
    {}%
}%
\@ifpackageloaded{longtable}{%
 \@ifundefined{NR@nopatch@longtable}
  {%
    \let\NRorg@LT@c@ption\LT@c@ption
    \def\LT@c@ption#1[#2]#3{%
     \NRorg@LT@c@ption{#1}[{#2}]{#3}%
     \def\@tempa{#2}%
     \ifx\@tempa\@empty
     \else
      \NR@gettitle{#2}%
     \fi
    }%
  }{}%
}{}%
```

Environment ‘description’.

```
\ltx@IfUndefined{descriptionlabel}{%
}{%
  \@ifundefined{NR@nopatch@lists}
   {\let\NRorg@descriptionlabel\descriptionlabel
    \def\descriptionlabel#1{%
     \NR@gettitle{#1}%
     \NRorg@descriptionlabel{#1}%
     }%
   }{}%
}%
}
```

Compatibility for package titlesec.

```
\AtBeginDocument{%
  \@ifpackageloaded{titlesec}{%
    \let\NRorg@ttl@sect@i\ttl@sect@i
    \@ifundefined{NR@nopatch@titlesec}
     {%
       \def\ttl@sect@i#1#2[#3]#4{%
         \NR@gettitle{#4}%
         \NRorg@ttl@sect@i{#1}{#2}[{#3}]{#4}%
         }%
      }{}%
  }{}%
}
```

4.2.1 Class beamer

```
\@ifclassloaded{beamer}{%
 \@ifclasslater{beamer}{2022-05-17}
  {}%do nothing
  {%
    \@ifundefined{NR@nopatch@beamer}
    {%
      \def\NR@PatchBeamer#1{%
```

```
        \expandafter\let\csname NRorg@beamer@#1\expandafter\endcsname
                        \csname beamer@#1\endcsname
        \begingroup
          \edef\x{\endgroup
            \long\def\expandafter\noexpand\csname beamer@#1\endcsname
                [####1]{% hash-ok
              \noexpand\NR@gettitle{####1}%
              \expandafter\noexpand\csname NRorg@beamer@#1\endcsname
              [{####1}]%
            }%
          }%
          \x
      }%
      \AddToHook{class/beamer/after}{%
      \NR@PatchBeamer{section}%
      \NR@PatchBeamer{subsection}%
      \NR@PatchBeamer{subsubsection}%
```

Theorem names.

```
      \addtobeamertemplate{theorem begin}{%
       \expandafter\NR@gettitle\expandafter{\inserttheoremaddition}%
      }{}%
      \@ifdefinable{\NRorg@beamer@descriptionitem}{%
        \let\NRorg@beamer@descriptionitem\beamer@descriptionitem
        \renewcommand{\beamer@descriptionitem}[1]{%
          \NR@gettitle{#1}%
          \NRorg@beamer@descriptionitem{#1}%
        }%
      }%
     }%Hook
   }{}%@ifundefined
  }%class later
 }{}
```

4.2.2 Theorems

```
\ltx@IfUndefined{@opargbegintheorem}{}{%
  \let\NRorg@opargbegintheorem\@opargbegintheorem
  \def\@opargbegintheorem#1#2#3{%
    \NR@gettitle{#3}%
    \NRorg@opargbegintheorem{#1}{#2}{#3}%
  }%
}
\AtBeginDocument{%
  \@ifpackageloaded{amsthm}{%
    \let\NRorg@begintheorem\@begintheorem
    \begingroup
      \edef\x{macro:\string#1\string#2[\string#3]}%
      \@onelevel@sanitize\x
      \def\y#1->#2\@nil{#1}%
      \edef\z{\expandafter\y\meaning\@begintheorem->\@nil}%
      \@onelevel@sanitize\z
    \expandafter\endgroup
    \ifx\x\z
      \def\@begintheorem#1#2[#3]{%
```

\NR@@setref

```
\def\NR@@setref#1{%
  \ifx\@undefined#1%
    \let#1\relax
  \fi
  \@setref#1%
}
```

\T@ref

```
\def\T@ref#1{%
  \NR@ref@showkeys{#1}%
  \NR@setref{#1}\@firstoffive{#1}%
}%
```

\@refstar

```
\def\@refstar#1{%
  \NR@ref@showkeys{#1}%
  \NR@setref{#1}\@firstoffive{#1}%
}%
```

\T@pageref

```
\def\T@pageref#1{%
  \NR@ref@showkeys{#1}%
  \NR@setref{#1}\@secondoffive{#1}%
}%
```

\@pagerefstar

```
\def\@pagerefstar#1{%
  \NR@ref@showkeys{#1}%
  \NR@setref{#1}\@secondoffive{#1}%
}%
```

\T@Ref

```
\def\T@Ref#1{%
    \NR@ref@showkeys{#1}%
    \NR@setref{#1}\NR@MakeUppercaseFirstOfFive{#1}%
  }%
\def\NR@MakeUppercaseFirstOfFive#1#2#3#4#5{%
    \MakeUppercase#1%
  }%
```

\@Refstar

```
\def\@Refstar#1{%
    \NR@ref@showkeys{#1}%
    \NR@setref{#1}\NR@MakeUppercaseFirstOfFive{#1}%
  }%

\ifNR@showkeys
  \ifx\SK@ref\@empty
  \else
  \renewcommand\NR@ref@showkeys[1]{%
    \@safe@activestrue
    \SK@\SK@@ref{#1}%
```

\@ifundefined 18, 64, 107, 114, 119, 139, 186, 195, 210, 222, 235, 376, 388, 428
\@namerefstar 369, 379, 384
\@nil 5, 11, 282, 283
\@onelevel@sanitize . . 8, 281, 284, 411
\@opargbegintheorem 270, 271
\@pagerefstar . 329, 357
\@part 135, 141
\@refstar 321, 355
\@safe@activesfalse 302, 350
\@safe@activestrue 301, 306, 348
\@schapter . . . 138, 179
\@secondoffive 297, 327, 331
\@sect 105, 107
\@setref 315
\@spart 136, 145
\@ssect 113, 114
\@tempa 73, 84, 92, 94, 95, 200, 201
\@thirdoffive 298, 366, 373
\@undefined 312
\@vpageref 422
\@writetocindents@ . 90

A

\addtobeamertemplate 255
\AddToHook . . . 251, 353
\AtBeginDocument 183, 219, 276, 403, 426

B

\beamer@descriptionitem 259, 260
\begingroup 17, 30, 48, 68, 91, 240, 279, 305, 364, 371, 392, 395, 397, 398, 408

C

\ch@pt@c . . 160, 165, 170
\csname 95, 238, 239, 242, 245, 309, 404, 409

D

\DeclareDocumentCommand 354, 356, 358
\DeclareHookRule . . 361
\DeclareRobustCommand 420
\def 5, 6, 7, 28, 31, 45, 49, 65, 69, 72, 90, 101, 108, 115, 125, 141, 145, 149, 156, 163, 179, 188, 198, 200, 212, 224, 237, 242, 271, 282, 287, 296, 297, 298, 299, 300, 304, 311, 317, 321, 325, 329, 333, 337, 340, 362, 369, 386, 391, 396, 399, 400, 407, 431
\descriptionlabel 211, 212
\do 92

E

\edef 9, 73, 241, 280, 283, 410, 415
\else 128, 162, 166, 169, 202, 346, 405, 433
\endcsname 95, 238, 239, 242, 245, 309, 404, 409
\endgroup 22, 41, 59, 83, 99, 241, 285, 308, 367, 374, 415
\expandafter 10, 83, 165, 170, 238, 242, 245, 256, 283, 285, 307, 309

F

\fi . 62, 85, 86, 130, 171, 172, 173, 204, 291, 314, 351, 352, 424, 435

G

\getrefbykeydefault 399, 400
\GetTitleString . . . 102
\GetTitleStringResult 103
\global 20

I

\if@filesw 67
\if@nobreak 85
\IfBooleanTF . . 355, 357, 359, 379, 384
\ifheadnameref 126, 167
\ifNR@showkeys 14, 44, 344
\ifthenelse . . 390, 391
\ifvmode 85
\ifx 160, 164, 201, 286, 312, 345, 404, 432
\immediate 93
\inserttheoremaddition 256

L

\label . . 28, 63, 365, 372
\label@hook 24, 32, 50, 70
\label@name . 31, 49, 69
\let . . . 63, 71, 103, 105, 113, 124, 135, 136, 137, 138, 187, 197, 211, 221, 238, 259, 270, 278, 313, 365, 372, 390, 392, 395, 397, 406, 430, 434
\long 141, 145, 188, 242, 296, 297, 298, 299, 300
\lst@@caption 434
\lst@label 432
\lst@MakeCaption 430, 431
\LT@c@ption . . 197, 198
\ltx@empty 5, 11, 160, 164
\ltx@GlobalAppendToMacro 25
\ltx@IfUndefined 120, 122, 154, 157, 208, 269
\ltx@label 63

M

\M@sect 124, 125
\MakeUppercase 338
\meaning 283

N

\Nameref 386
\nameref . . 376, 386, 421
\newcommand 303
\newcounter 106
\NewDocumentCommand 378
\newif 14
\newlabel . 34, 52, 75, 94
\nobreak 85
\noexpand 72, 242, 244, 245
\NR@@caption . 187, 190
\NR@@setref . . 309, 311
\NR@@vpageref . 406, 413
\NR@chapter 137, 151, 175
\NR@gettitle . . 101, 110, 116, 127, 129, 142, 146, 150, 158, 161, 165, 168, 170, 180, 189, 203, 213, 225, 244, 256, 261, 272, 288
\NR@MakeUppercaseFirstOfFive 335, 337, 342
\NR@part 135, 143
\NR@PatchBeamer . . . 237, 252, 253, 254
\NR@ref@showkeys . . 303, 318, 322, 326, 330, 334, 341, 347, 363, 370
\NR@sanitize@labelname 7, 26
\NR@schapter . 138, 181
\NR@sect 105, 111
\NR@setref 304, 319, 323, 327, 331, 335, 342, 366, 373
\NR@showkeysfalse . . 15
\NR@showkeystrue . . . 20
\NR@spart 136, 147
\NR@ssect 113, 117
\NR@strip@period . 5, 10
\NR@TE@begingroup 392, 396
\NR@temp 163, 164
\NRorg@beamer@descriptionitem 258, 259, 262
\NROrg@begingroup 395, 397
\NRorg@begintheorem 278, 289
\NRorg@descriptionlabel 211, 214
\NROrg@ifthenelse 390, 393
\NROrg@lst@MakeCaption 430, 436
\NRorg@LT@c@ption 197, 199
\NRorg@M@sect . 124, 131
\NRorg@opargbegintheorem 270, 273
\NRorg@ttl@sect@i 221, 226

P

\PackageWarning . . . 382
\pageref . . 356, 386, 400
\protect 72
\protected@write 33, 51
\providecommand 24, 294, 295, 301, 302, 387

R

\Ref 358
\ref 354, 399
\relax . . . 6, 71, 313, 404
\renewcommand . 260, 347
\RenewDocumentCommand 383
\RequirePackage . 2, 3, 4

S

\Sectionformat 111, 117, 387
\setcounter 109
\SK@ 47, 349
\SK@@label 47
\SK@@ref 349
\SK@ref 345
\slabel 64
\string 34, 52, 75, 94, 280, 382
\strip@period 6

T

\T@nameref 362, 379, 384
\T@pageref . . . 325, 357
\T@Ref 333, 359
\T@ref 317, 355
\the 416
\thepage . . 36, 54, 71, 77
\thesubequation 76
\toks@ 412, 416
\ttl@sect@i . . 221, 224

U

\unskip 421, 422

V

\vnameref 420

W

\write 74, 93

X

\x 241, 249, 280, 281, 286, 410, 411, 415, 416, 418

Y

\y 282, 283

Z

\z 283, 284, 286