

array-Variante

$$\begin{bmatrix} & & & \\ \vdots & \mathbf{K}_{11}^{e,g} & & \\ \vdots & \vdots & & \\ & & \mathbf{K}_{22}^{e,g} & \\ & \vdots & & \mathbf{K}_{33}^{e,g} \end{bmatrix}$$

bordermatrix-Variante

$$\begin{array}{c} u_1 \\ \vdots \\ \theta_{z1} \\ u_2 \\ \vdots \\ \theta_{z2} \\ u_3 \\ \vdots \\ \theta_{z3} \end{array} \begin{bmatrix} & u_1 & \dots & \theta_{z1} & u_2 & \dots & \theta_{z2} & u_3 & \dots & \theta_{z3} \\ & & & \mathbf{K}_{11}^{e,g} & & & \mathbf{K}_{12}^{e,g} & & & \mathbf{K}_{13}^{e,g} \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & \mathbf{K}_{22}^{e,g} & & & \mathbf{K}_{11}^{e,g} \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & & \mathbf{K}_{33}^{e,g} \end{bmatrix}$$

boardermatrix-Makro-Code

```

1 \makeatletter
2 \newif\if@borderstar
3 \def\bordermatrix{\@ifnextchar*{%
4     \@borderstartrue\@bordermatrix@i}
5     {\@borderstarfalse\@bordermatrix@i*}%
6 }
7 \def\@bordermatrix@i*{\@ifnextchar[{\@bordermatrix@ii}
8     {\@bordermatrix@ii[()]}}
9 \def\@bordermatrix@ii[#1]#2{%
10 \begingroup
11     \m@th\@tempdima8.75\p@\setbox\z@\vbox{%
12         \def\cr{\crr\noalign{\kern 2\p@\global\let\cr\endline }}%
13         \lineskip=0pt
14         \ialign {$##$\hfil\kern 2\p@\kern\@tempdima & \thinspace %
15             \hfil $##$\hfil && \hfil $##$\hfil\crr\omit\strut %
16             \hfil\crr\noalign{\kern -\baselineskip}#2\crr\omit %
17             \strut\cr}}%
18     \setbox\tw@\vbox{\unvcopy\z@\global\setbox\@ne\lastbox}%
19     \setbox\tw@\hbox{\unhbox\@ne\unskip\global\setbox\@ne\lastbox}%
20     \setbox\tw@\hbox{%
21         $\kern\wd\@ne\kern -\@tempdima\left\@firstoftwo#1%
22         \if@borderstar\kern2pt\else\kern -\wd\@ne\fi%
23         \global\setbox\@ne\vbox{\box\@ne\if@borderstar\else\kern 2\p@\fi}%
24         \vcenter{\if@borderstar\else\kern -\ht\@ne\fi%
25             \unvbox\z@\kern-\if@borderstar2\fi\baselineskip}%
26             \if@borderstar\kern-2\@tempdima\kern2\p@\else\,\fi\right
27             \@secondoftwo#1 $%
28     }\null \; \vbox{\kern\ht\@ne\box\tw@}%
29 \endgroup
30 }
31 \makeatother

```

Listing 1: boardermatrix-Makro-Code