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Here is the Title

First Author[1,*] and Co-Author(s)[2]

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[2] *Address of Co-Author(s).*

Abstract. The abstract should provide the application context and briefly summarise the main findings. It should not be too long — normally no longer than half a page.

AMS subject classifications: 65M10, 78A48

Key words: At least 3 items and at most 5 items.

1 Preparation of manuscript

The Title Page should contain the article title, authors' names and complete affiliations, footnotes to the title, and the postal address for manuscript correspondence (including e-mail address). The Abstract should provide a brief summary of the main findings of the paper.

2 Introduction

The Introduction should provide details of the application context and previous relevant publications, leading to a brief summary of the direction of the research undertaken and the following structure of the article (Sections).

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2.1 Equations

For preparation of the manuscript we strongly recommend using file `cmaa_template.tex` and examples provided here.

Thus equations should be typewritten by using `equation, align, multline` environments. For example, for numbered one-line formulas use the construction

```
\begin{equation}\label{eq2.1}
\text{This is a  sample equation:}\quad ax=c.
\end{equation}
```

to obtain

$$\text{This is a sample equation:} \quad ax=c. \tag{2.1}$$

Please avoid the obsolete `\eqnarray` environment, which has several bugs.

2.2 Numbered multi-line equations

Example 2.1. The equation

$$v_h(x,y)=V_1(x,y), \tag{2.2}$$
$$v_h^+(x,y)=v_h^-(x,y). \tag{2.3}$$

can be written as

```
\begin{align}
&v_h(x,y)=V_1(x,y),\label{eq2.2}\\
&v_h^+(x,y)=v_h^-(x,y).\label{eq2.3}
\end{align}
```

Example 2.2. The equation

$$\begin{aligned} v_h(x,y)&=V_1(x,y),\\ v_h^+(x,y)&=v_h^-(x,y). \end{aligned} \tag{2.4}$$

can be written as

```
\begin{equation}\label{eq2.4}
\begin{aligned}
&v_h(x,y)=V_1(x,y),\\
&v_h^+(x,y)=v_h^-(x,y).
\end{aligned}
\end{equation}
```

Do not use the construction

```
\begin{equation*}
\begin{aligned}
&v_h(x,y)=V_1(x,y),\\
&v_h^+(x,y)=v_h^-(x,y).
\end{aligned}
\end{equation*}
```

It should be `align*` instead.

```
\begin{align*}
&v_h(x,y)=V_1(x,y),\\
&v_h^+(x,y)=v_h^-(x,y).
\end{align*}
```

Example 2.3. The equation

$$v_h(x,y) = V_1(x,y) + v_h^-(x,y) + V_2(x,y) + v_h^+(x,y). \tag{2.5}$$

can be written as

```
\begin{align}
v_h(x,y)&=V_1(x,y)+v_h^-(x,y)\nonumber\\
        &\quad +V_2(x,y)+v_h^+(x,y).\label{eq2.5}
\end{align}
```

Equations should be cited by using the `\eqref` command and the form `Eq.~\eqref{eq2.1}` or simply `\eqref{eq2.1}`. In the text they appear as Eq. (2.1) or (2.1).

2.3 Non-numbered equations

For non-numbered equations, please use the commands `equation*`, `align*`, `multline*` rather than `$$ $$` and `\[ \]`. For example, the equation

$$a \neq b$$

should be written as

```
\begin{equation*}
 a\neq b
\end{equation*}
```

2.4 Theorems, corollaries, lemmas, definitions, propositions, examples, remarks

For theorems, corollaries, lemmas, definitions, propositions, examples and remarks special environments are predefined. Please use the following constructions:

For theorems:

```
\begin{theorem}\label{thm1}
Text of theorem
\end{theorem}
```

For corollaries:

```
\begin{corollary}\label{col1}
Text of corollary
\end{corollary}
```

For lemmas:

```
\begin{lemma}\label{lem1}
Text of lemma
\end{lemma}
```

For definitions:

```
\begin{definition}\label{def1}
Text of definition
\end{definition}
```

For propositions:

```
\begin{proposition}\label{prop1}
Text of proposition
\end{proposition}
```

For examples:

```
\begin{example}\label{exm1}
Text of example
\end{example}
```

For remarks:

```
\begin{remark}\label{rem1}
Text of remark
\end{remark}
```

For proofs:

```
\begin{proof}
Proof of the statement
\end{proof}
```

For results from other sources:

```
\begin{theorem}[cf.~Author \& Co-Author~\cite{firstauthor}]
\label{thm1}
Text of theorem
\end{theorem}
```

2.5 References

References should be listed at the end of the paper in alphabetical order according to the surnames of the first author, and should be cited in the text using `\cite` command as `\cite{firstauthor,Berger,deBoor,coutsias1996}`. In the text the citations will appear as [1–3, 5].

Abbreviations of titles of periodicals/books should be given by using Math. Reviews, see e.g. `https://mathscinet.ams.org/msnhtml/serials.pdf`

2.6 Figures

Figures should be in a finished form suitable for publication (in eps format). Number figures consecutively with Arabic numerals. Lettering on drawings should be generated by high-resolution computer graphics and large enough to withstand appropriate reduction for publication.

Here are some templates for figures:

```
\begin{figure}[!tbh]
\centering
\includegraphics[scale=0.6]{filename}
\caption {Example 1.}
\label{fig1}
\end{figure}
```

Figure 1: Example 1.

```
\begin{figure}[!tbh]
\centering
\includegraphics[width=1in,height=2.5in]{filename}
\caption {Example 2.}
\label{fig2}
\end{figure}
```

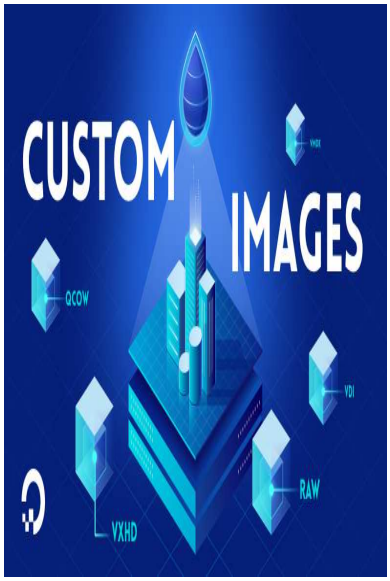

Figure 2: Example 2.

```
\begin{figure}[!tbh]
\centering
\includegraphics[width=\textwidth]{filename}
\caption {Example 3.}
\label{fig3}
\end{figure}
```

Figure 3: Example 3.

```
\begin{figure}[!tbh]
\centering
\includegraphics[height=5.5cm]{filename}
\caption {Example 4.}
\label{fig4}
\end{figure}
```

Figure 4: Example 4.

```
\begin{figure}[!tbh]
\centering
\begin{minipage}{0.47\textwidth}
\centering
\includegraphics[height=3.5cm]{filename}
\end{minipage}
\begin{minipage}{0.47\textwidth}
\centering
\includegraphics[height=3.5cm]{filename}
\end{minipage}
\caption {Example 5.}
\label{fig5}
\end{figure}
```

Figure 5: Example 5.

2.7 Tables

Here are some templates for tables:

Table 1: Example 1.

N_t	L_∞ Error	CR	L_∞ Error	CR
8	6.3603e-01	-	5.2903e-02	-
16	2.1078e-01	1.59	1.0824e-02	2.29
32	7.9903e-02	1.40	2.6661e-03	2.02
64	3.5422e-02	1.17	6.7627e-04	1.98

```
\begin{table}[!tbh]
\caption{Example 1.}
\label{ex_1}
\centering
\medskip\small\renewcommand{\arraystretch}{1.15}
\begin{tabular}{||ccccc||}
\hline
$N_t$  & $L_\infty$ Error & CR  &$L_\infty$ Error & CR  \\
\hline
8   & 6.3603e-01  & -    & 5.2903e-02 & -\\
16  & 2.1078e-01  & 1.59 & 1.0824e-02 & 2.29  \\
32  & 7.9903e-02  & 1.40 & 2.6661e-03 & 2.02  \\
64  & 3.5422e-02  & 1.17 & 6.7627e-04 & 1.98  \\
\hline
\end{tabular}
\end{table}
```

Table 2: Example 2.

	N_t	L_∞ Error	CR	L_∞ Error	CR
1	8	6.3603e-01	-	5.2903e-02	-
2	16	2.1078e-01	1.59	1.0824e-02	2.29
3	32	7.9903e-02	1.40	2.6661e-03	2.02

```
\begin{table}[!tbh]
\caption{Example 2.}
\label{ex_2}
\centering
\medskip\small\renewcommand{\arraystretch}{1.15}
\begin{tabular}{||l|ccccc||}
\hline
&$N_t$  & $L_\infty$ Error & CR  &$L_\infty$ Error & CR  \\
\hline
1 & 8   & 6.3603e-01  & -    & 5.2903e-02 & -\\
2 & 16  & 2.1078e-01  & 1.59 & 1.0824e-02 & 2.29  \\
3 & 32  & 7.9903e-02  & 1.40 & 2.6661e-03 & 2.02  \\
4 & 64  & 3.5422e-02  & 1.17 & 6.7627e-04 & 1.98  \\
\hline
\end{tabular}
\end{table}
```

Table 3: Example 3.

Accuracy of time discretisation, $N_x \times N_y = 4096^2$									
N_t	L_∞ Error	CR	L_∞ Error	CR	N_t	L_∞ Error	CR	L_∞ Error	CR
8	6.3603e-01	-	5.2903e-02	-	4	8.0540e-02	-	1.7316e-02	-
16	2.1078e-01	1.59	1.0824e-02	2.29	8	7.7251e-03	3.38	1.1771e-03	3.89
32	7.9903e-02	1.40	2.6661e-03	2.02	16	1.0326e-03	2.90	8.9444e-05	3.72

```
\begin{table}[!tbh]
\caption{Example 3.}
\label{t3}
\centering
\medskip\small\renewcommand{\arraystretch}{1.15}
\begin{tabular}{||ccccc|ccccc||}
\hline
\multicolumn{10}{||c||}{Accuracy of time discretisation} \\
\hline
$N_t$ & $L_\infty$ Error & CR & $L_\infty$ Error & CR & $N_t$ &
$L_\infty$ Error & CR & $L_\infty$ Error & CR \\
\hline
8  & 6.3603e-01 & -    & 5.2903e-02 & -    & 4 &
8.0540e-02 & -    & 1.7316e-02 & -\\
16 & 2.1078e-01 & 1.59 & 1.0824e-02 & 2.29 & 8 &
7.7251e-03 & 3.38 & 1.1771e-03 & 3.89 \\
32 & 7.9903e-02 & 1.40 & 2.6661e-03 & 2.02 & 16 &
1.0326e-03 & 2.90 & 8.9444e-05 & 3.72 \\
\hline
\end{tabular}
\end{table}
```

Table 4: Example 4.

	N_t	L_∞ Error	CR	L_∞ Error	CR
1	8	6.3603e-01	-	5.2903e-02	-
2	16	2.1078e-01	1.59	1.0824e-02	2.29
3	32	7.9903e-02	1.40	2.6661e-03	2.02
4	64	3.5422e-02	1.17	6.7627e-04	1.98

```
\begin{table}[!tbh]
\caption{Example 4.}
\label{t4}
\centering
\medskip\small\renewcommand{\arraystretch}{1.15}
\begin{tabular}{||l|ccccc||}
\hline
&$N_t$  & $L_\infty$ Error & CR  &$L_\infty$ Error & CR  \\
\cline{3-5}
1 & 8   & 6.3603e-01  & -    & 5.2903e-02 & -\\
2 & 16  & 2.1078e-01  & 1.59 & 1.0824e-02 & 2.29  \\
3 & 32  & 7.9903e-02  & 1.40 & 2.6661e-03 & 2.02  \\
4 & 64  & 3.5422e-02  & 1.17 & 6.7627e-04 & 1.98  \\
\hline
\end{tabular}
\end{table}
```

For big tables you can change font size

`\medskip\small\renewcommand{\arraystretch}{1.15}`

to

`\medskip\footnotesize\renewcommand{\arraystretch}{1.15}`

and/or reduce space between columns

`\setlength\tabcolsep{-0.9mm}`

and/or reduce space between rows

`\medskip\small\renewcommand{\arraystretch}{1.02}`

Acknowledgments

At the end of paper but preceding the References.

References

[1] F. Author and A. Co-Author, *Preparation of manuscript*, Intern. Public. 1 (2018), 12–21.
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