Write the title here with small (minuscule) letters (except the first letter of the title)

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Abstract

Write here the abstract of your work!

This red text contains guidelines on how your work should be written for submission to ENAMA, which must be removed from the abstract.

1) This is the model to prepare your work for submission to ENAMA.

2) Your contribution (work) must be written in english, otherwise it will not be accepted.

3) The use of macros, abbreviations or assigning new names to commands of the mathematical environment is not permitted.

4) Also, do not add new commands such as: "userpackage", "newcommand", etc.

5) The work must be 2 (two) pages long. In other words, it should not be just **one** or more than **two** pages long.

6) When there is more than one author (co-authors), underline the presenter of the work, as done for the second author above.

1. Introduction

The equations are listed sequentially in the text, numbered on the right and using the command `\label{}` to identify them and the command `\eqref{}` whenever necessary mention them in the text. For example,

$$\partial_t^2 u(x,t) - \mu(t)\Delta u(x,t) = 0 \quad \text{in} \quad Q, \tag{1.1}$$

with initial and boundary conditions

$$\begin{aligned} u(x,0) = u_0(x), \quad \partial_t u(x,0) = u_1(x) \quad \text{in} \quad \Omega, \\ u(x,t) = 0 \quad \text{on} \quad \Gamma\times]0,\infty[, \end{aligned} \tag{1.2}$$

where u is the displacement, Δ denotes the Laplace operator and μ is a positive real function, introduced by [1, p.12]. Existence and uniqueness results can be found in [2, 3].

To generate the figures is recommended to use the following structure:

```
\begin{figure}
\includegraphics[scale=•]{•}
\caption{•}
\end{figure}
```

and are cited in the text via the command `\eqref{}` with the name of "label" in brackets, analogously the equations.

Finally, to end the proof use `\cqdf`

2. Main Results

The main results are ...

Theorem 2.1. *Suppose ...*

Proposition 2.1. *If* $u_0 \in H_0^1(\Omega) \cap H^2(\Omega)$ *and* $u_1 \in H_0^1(\Omega)$ *then the system has a unique solution in the class*

$$\begin{aligned} u \quad & \textit{belongs to} \quad L^\infty\left(0,\infty; H_0^1(\Omega)\cap H^2(\Omega)\right), \\ \partial_t u \quad & \textit{belongs to} \quad L^\infty\left(0,\infty; H_0^1(\Omega)\right), \\ \partial_t^2 u \quad & \textit{belongs to} \quad L^\infty\left(0,\infty; L^2(\Omega)\right). \end{aligned} \tag{2.1}$$

Proof. Using ... one has ... ∎

Proposition 2.2. *Considering* $\cdots$

It is an immediate consequence of Propositions 2.1 and 2.2 $\cdots$

Corollary 2.1. $\ldots+\cdots=\frac{a}{b}\vdots\ddots\rightthreetimes\leftthreetimes$ *this* $\nexists$*!*

The above Corollary was generated by

```
\begin{mycor}\label{2.1}
$\ldots+\cdots=\frac{a}{b} \vdots\ddots \rightthreetimes \leftthreetimes$ this $\nexists$!
\end{mycor}
```

The reference list (bibliography) at the end of this text can be generated as follows:

```
\begin{thebibliography}{00}
\bibitem{}
\end{thebibibliography}
```

References are introduced in the text via the command `\cite{}`.

References

[1] Lions, J. L. - *Quelques méthodes de résolution des problèmes aux limites non linéares*, Dunod-Gauthier Villars, Paris, first edition, (1969).

[2] Sobolev, S. I. - *Applications de analyse functionnelle aux équations de la physique mathématique*, Léningrad, (1950).

[3] Costa, R. H. & Silva, L. A. - *Existence and boundary stabilization of solutions*, Analysis Journal, **10**, (2010), 422-444.