ARGENTINE INDUSTRIAL, COMPUTATIONAL AND APPLIED MATHEMATICS ASSOCIATION. MODEL ARTICLE

First Author$^\flat$, Second Author† and Third Author$^{\flat,\dagger}$

$^\flat$*Applied Mathematics Team, Universidad Nacional de San José de los Sapos, Caburé 219, 2534 San José de los Sapos, Argentina, gma@unsjdls.edu.ar, www.unsjdls.edu.ar*
†*Industrial Mathematics Team, Universidad Nacional de San José de los Sapos, Caburé 219, 2534 San José de los Sapos, Argentina, gmi@unsjdls.edu.ar, www.unsjdls.edu.ar*

Abstract: The abstract is limited to a single paragraph with no more than 150 words. It must be self-contained.

1 INTRODUCTION

ASAMACI - Argentine Industrial, Computational and Applied Mathematics Association - Officers Board has decided to utilize from now on this LaTEX format for the MACI scientific reunions.

The third meeting, III MACI 2011, will take place at Bahía Blanca city, from May 9 – 11, 2011. The presented contributions will be published on a MACI volume, named MACI, 3(2011). This conference will include the following scientific sessions:

1. Biomathematics

2. Mathematical Economics

3. Differential Equations and Applications

4. Quantitative Finances

5. Numerical Methods and Applications

6. Discrete Mathematics and Applications

7. Industrial Mathematics and Applications

8. Computational Mechanics

9. Interdisciplinary Mathematical Models

10. Optimization Theory and Applications

11. Probability, Statistics and Stochastic Processes

12. Free Boundary Problems and Applications

13. Inverse Problems and Applications

14. Mathematical Problems in Continuum Mechanics

15. Image and Signal Processing

16. Dynamical Systems

17. Optimal Control Theory and Applications

18. Heat and Mass Transfer

19. Students Posters

20. Graduate Students Posters

Each work must have a minimum of two and a maximum of four pages and must be send in pdf format with no more than 2 Mb before December 14th to the following e-mail address

maci2011@uns.edu.ar

The corresponding session for the submitted work must be specified in the mail subject (if not, the work will not be considered). For instance,

From: gma@unsjdls.edu.ar
to: maci2011@uns.edu.ar
Subject: 4-Quantitative Finances(*Corresponding Author Name*)

Besides, the pdf file must be named in following way:

4-QuantitativeFinances-CorrespondingAuthor.pdf

The works will be evaluated by the scientific session organizers or by opportunely designed specialists. The authors whose works should need a revision will be contacted by the corresponding scientific session organizers. On the other hand, the Organizing Committee will send the final decisions in February, 2011.

1.1 INSTALATION

One way to begin is to copy the file "MACIexample-english.tex" as a new file and to replace the appropriate text. It is necessary to save the file "maciarticle.cls" on a directory where it can be identified by LaTeX. It can be the same directory where the work is written or some directory on the TEXIMPUTS path.

1.2 USED LATEX PACKAGES

The class maciarticle require the following LaTeX packages:

calc, indentfirst, authblk, natbib, babel, color, hyperref, nameref, url, times, fancyhdr

1.3 MACIARTICLE CLASS OPTIONS

The maciarticle class comes from the standard LaTeX class "article", so it accepts the same options. Nevertheless, in the sake of uniformity of the MACI work formats, we require the authors to use the maciarticle.cls class without any modification of the established parameters. The option that still in use is the language, and it is possible to choose among "english" or "spanish". The file "MACIexample-english.tex" is written under the option "english"; see the first line:

```
\documentclass[english]{maciarticle}
```

2 AUTHORS AND FILIATIONS

These data are manage with the "authblk" package, which is included on the maciarticle class. In case you have any doubt, you can see the file "authblk.dvi", distributed with the package. In general, the following example should be enough.

In the case that all the authors belong to the same institution, the macro "\voidaffil" must be used as the character for the filiation, e.g.

\author[\voidaffil]{First A. Author},
\author[\voidaffil]{Second B. Author}
\author[\voidaffil]{Third C. Author}

\author[\voidaffil]{Fourth D. Author}

\affil[\voidaffil]{Applied Mathematics Team, Universidad Nacional de San José de los Sapos, Caburé 219, 2534 San José de los Sapos, Argentina, gma@unsjdls.edu.ar, www.unsjdls.edu.ar }.

If an author belongs to several institutions, the filiation characters must be separated by commas, e.g.

\author[a,b]{First A. Author},

3 KEYWORDS

Please, don't write more than six keywords.

4 RECOMMENDATION FOR WORD SEPARATION

The maciarticle class include automatically the package "babel", so LaTeX will separate the words correctly if necessary. Nevertheless, problems with word separation appear frequently on spanish articles. We recommend to control this item. [1]

5 THEOREMS, LEMMAS, ETC

The enunciation of the theorem must be introduced between
\begin{theorem} \label{suetiqueta}
enunciation
\end{theorem}
The label \label{itslabel} can be used to refer to the mentioned theorem on any part of the text using \ref{itslabel}. The theorem will be shown in italics

Theorem 1 *Theorem enunciation*

and we refer it as Theorem 1.

In a similar way we have
\begin{lemma} \label{et-lemma}
asdf \end{lemma}
and the propositions
\begin{proposition} \label{et-prop}
asdf \end{proposition}.
The other theorem type environments are:
corollary, definition, example y note.

5.1 PROOFS

Put the proof text between
\begin{proof} Proof \end{proof}
A qed symbol, □, is shown automatically at the end of every proof. Example:
Proof. Proof text.   □

6 FIGURES

All the figures must be consecutively numerated and labeled, with a centered title, as it is shown in the next example:
 \begin{figure}[!h]
 \begin{center}
 \includegraphics[width=0.5\textwidth]{figura03.eps}
 \caption{Connected Domain}

---

[1]This is the way to introduce a footnote, if necessary.

```
\label{Domain}
\end{center}
\end{figure}
```
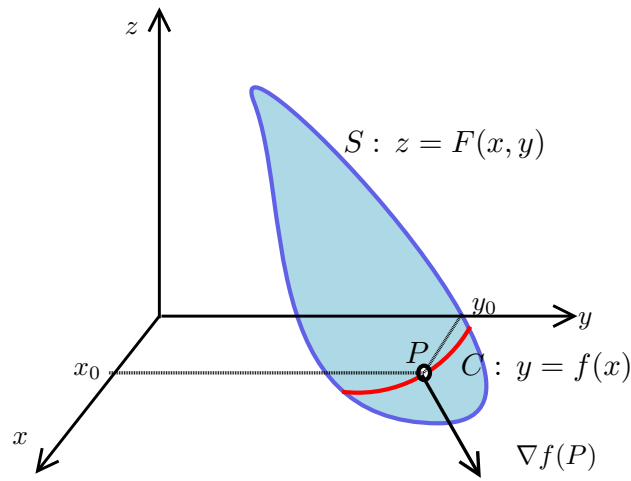

Figure 1: Connected Domain

The figures must be mentioned on the text: Figure 1. Figures in color are allowed.

ACKNOWLEDGMENTS

Acknowledgments must be introduced on a non numerated section (`\section*{Acknowledgments}`) before the references.

7 REFERENCES

The references must respect the following format, and will be cited on the text on this way: [1],[2],[6].

REFERENCES

[1] F. BACCELLI, G. COHEN, G.J. OLSDER, AND J-P. QUADRAT, *Synchronization and linearity. An algebra for discrete event systems*, Wiley and Sons, 1992.

[2] R. BELLAMN, AND W. KARUSH, *On a new functional transform in analysis: the maximum transform*, Bull. AMS, 67 (1961), pp.501-503.

[3] M.G. CRANDALL, L.C. EVANS, P.L. LIONS, *Some properties of viscosity solutions of Hamilton-Jacobi equations*, Trans. AMS, Vol. 282 (1984), pp. 487-502.

[4] M. KREIN, AND MILMAN, *On the extreme points of regularly convex sets*, Studia Math., 9 (1940), pp.133-138.

[5] H.W. KUHN, AND A.W. TUCKER, *Nonlinear programming* in Proceedings of the Second Berkeley Symposium on Mathematical Statistics and Probability, Univ. of California Press, Berkeley, (1951), 481-492.

[6] W.H. YOUNG, *On classes of summable functions and their Fourier series*, Proc. Royal Soc. (A)87 (1912), pp. 225-229.