Title Written in Bold, Size 18 pt, Centered, with the First Letter of Each Main Word Capitalized

CAS Working Party on XXXXXX

**Abstract:** (Garamond and Bold, Size 10 pt, Left Justified with .2 indents left and right, line spacing single)   
You may use the format below or simply write a paragraph covering all of the items listed below. If writing the abstract in paragraph format, please include Keywords separately.

**Motivation.** Explain the importance of the problem investigated in the paper.

**Method**. Give a short account of the most important methods used in your investigation.

**Results**. Present the main results reported in the paper.

**Conclusions**. Briefly present the conclusions and importance of the results.

**Availability**. If the original software used in the investigation is available for distribution, give here the Internet address.

**Keywords**. Write here up to six keywords relevant for the research presented in the manuscript. For example, capital allocation; generalized linear modeling; regression modeling; reserving.

# INTRODUCTION

The entire manuscript, including mathematical equations, tables, and figures must be prepared in electronic form and submitted as **Word** for **Windows** files. Use only fonts that come with Windows software. For the text use **Garamond** size 12. For all special characters (e.g., Greek characters) use the font **Symbol**. Line spacing is exactly 18 pt; spacing after paragraphs is 6 pt; first line is indented **.2** inches; text alignment is justified. Use carriage returns only to end headings and paragraphs, not to break lines of text. Automatic hyphenation should be turned off. Do not insert spaces before punctuation. Verify the correct spelling for the final version with the Spelling and Grammar function of Word.

Primary headings are numbered; font size 14; left-justified; bold; line spacing is single; spacing before paragraphs is 18 pt and after paragraphs is 12 pt; and in title case, i.e., with all initial letters capitalized.

In the **Introduction** section, present clearly and briefly the problem investigated, with relevant references. The main results should be enunciated.

## Research Context

<See below for discussion of secondary heading format> Outline the focus areas of the science to be addressed (it may be helpful to refer to the CAS Research Taxonomy). Also provide the results of your literature review of related research, including at a minimum a survey of the CAS Foundational Papers in this area.

## Objective

<See below for discussion of secondary heading format> Outline the gaps or weaknesses in the current research, and how the paper will address those weaknesses.

## Disclaimer

While this paper is the product of a CAS working party, its findings do not represent the official view of the Casualty Actuarial Society. Moreover, while we believe the approaches we describe are very good examples of how to address the issue of \_\_\_\_\_\_\_\_\_, we do not claim they are the only acceptable ones. [Add other statements as appropriate.]

## Outline

The remainder of the paper proceeds as follows. Section 2 will discuss …

# BACKGROUND AND METHODS

This section should cover the background and methods applied or studied. Use secondary sections to cover different areas.

All mathematical equations are centered, labeled in the order in which they appear in the section as per the example below, with Arabic numbers, in parentheses. In writing the equations use the following rules: vectors and matrices with bold; functions such as log, sin, cos normal, and all other mathematical symbols with italic.

|  |  |
| --- | --- |
| Equation | (2.1) |

## Secondary Heading

Secondary headings are numbered, font size 14, left-justified, bold, and with the first letter of each main word capitalized. Line spacing is single; spacing before paragraph is 12 pt and spacing after paragraph is 3 pt.

## Another Secondary Heading

Sample text for this section.

### Tertiary heading here

Tertiary headings are numbered, font size 12, left-justified, bold, and with the first letter of the heading capitalized. Line spacing is single; spacing before paragraph is 12 pt and spacing after paragraph is 3 pt.

### Another tertiary heading

Tertiary headings are numbered, font size 12, centered, bold, and with the first letter of the heading capitalized. Line spacing is single; spacing before paragraph is 12 pt and spacing after paragraph is 3 pt.

# RESULTS AND DISCUSSION

A clear presentation of all new results should be given, followed by a discussion of their significance and relationships with previous knowledge in the field.

# Tables

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| territory | policyholder | effective\_date | expiration\_date | premium |
| Athens | Reyes | 2001-08-15 | 2002-08-15 | 11,561 |
| Athens | Villagomez | 2001-07-21 | 2002-07-21 | 7,578 |
| Sparta | al-Abdullah | 2001-12-20 | 2002-12-20 | 10,294 |
| Sparta | Jefferson | 2001-12-17 | 2002-12-17 | 9,133 |
| Sparta | el-Mina | 2001-05-22 | 2002-05-22 | 9,812 |
| Athens | Hamlin | 2001-02-15 | 2002-02-15 | 10,702 |
| Sparta | Hitchcock | 2001-09-26 | 2002-09-26 | 8,917 |
| Athens | Lease | 2001-12-27 | 2002-12-27 | 10,743 |
| Sparta | Rivera | 2001-04-21 | 2002-04-21 | 8,620 |
| Athens | al-Sami | 2001-04-11 | 2002-04-11 | 8,554 |

# CONCLUSIONS

The main results should be presented clearly and briefly, insisting on their significance and degree of novelty.

#### Acknowledgment

The authors acknowledge …. Use font Garamond size 10. Line spacing is single; text is justified; no spacing before and after paragraphs, first line indented **.2** inches.

#### Supplementary Material

List supplementary materials, particularly datasets and sample models, stored electronically on the CAS Web Site.

Use font Garamond size 10. Line spacing is single; text is justified; no spacing before and after paragraphs, first line indented **.2** inches.

#### Appendix A

Write here the text for Appendix; delete this section if it does not apply. Use font Garamond size 12. Line spacing is exactly 18 pt; spacing after paragraphs is 6 pt; first line is indented **.2** inches; text alignment is justified.

# REFERENCES

1. Author 1 Last Name, Author 1 First Name Middle Initial, and Author 2 First Name Middle Initial Last Name, “Article Title,” Journal Title, Year, Vol. #, No. #, start page-end page.
2. Mildenhall, Stephen “Minimum Bias and Generalized Linear Models,” PCAS 1999, Vol. LXXVI, 393-487.
3. Brender, A., “The Use of Internal Models for Determining Liabilities and Capital Requirements,” North American Actuarial Journal, 2002, Vol. 6, No. 2, 1-10.
4. …next…
5. Use font Garamond size 10. Line spacing is single; text is justified; no spacing before and after paragraphs, hanging indent is .32 inches.

**Abbreviations and notations**

Collect here in alphabetical order all abbreviations and notations used in the paper

|  |  |
| --- | --- |
| APD, automobile physical damage | GLM, generalized linear models |
| CL, chain ladder | OLS, ordinary least squares |
| DFA, dynamic financial analysis | ERM, enterprise risk management |

#### Biographies of Working Party Members

**First Author** is assistant actuary at XYZ Insurance Company in ZZZ. She is responsible for reserving, capital modeling, and pricing. She has a degree in English from the University of YYY. She is a Fellow of the CAS and a Member of the American Academy of Actuaries. She participates on the CAS examination committee, and is a frequent presenter at industry symposia. [**You can include also: major work and research projects, professional accomplishments, or extracurricular activities**.]

**Second Author** is chief actuary at …

Each author can insert here a short biography.

Use font Garamond size 10. Line spacing is single; text is justified; no spacing before and after paragraphs, first line indented **.2** inches.