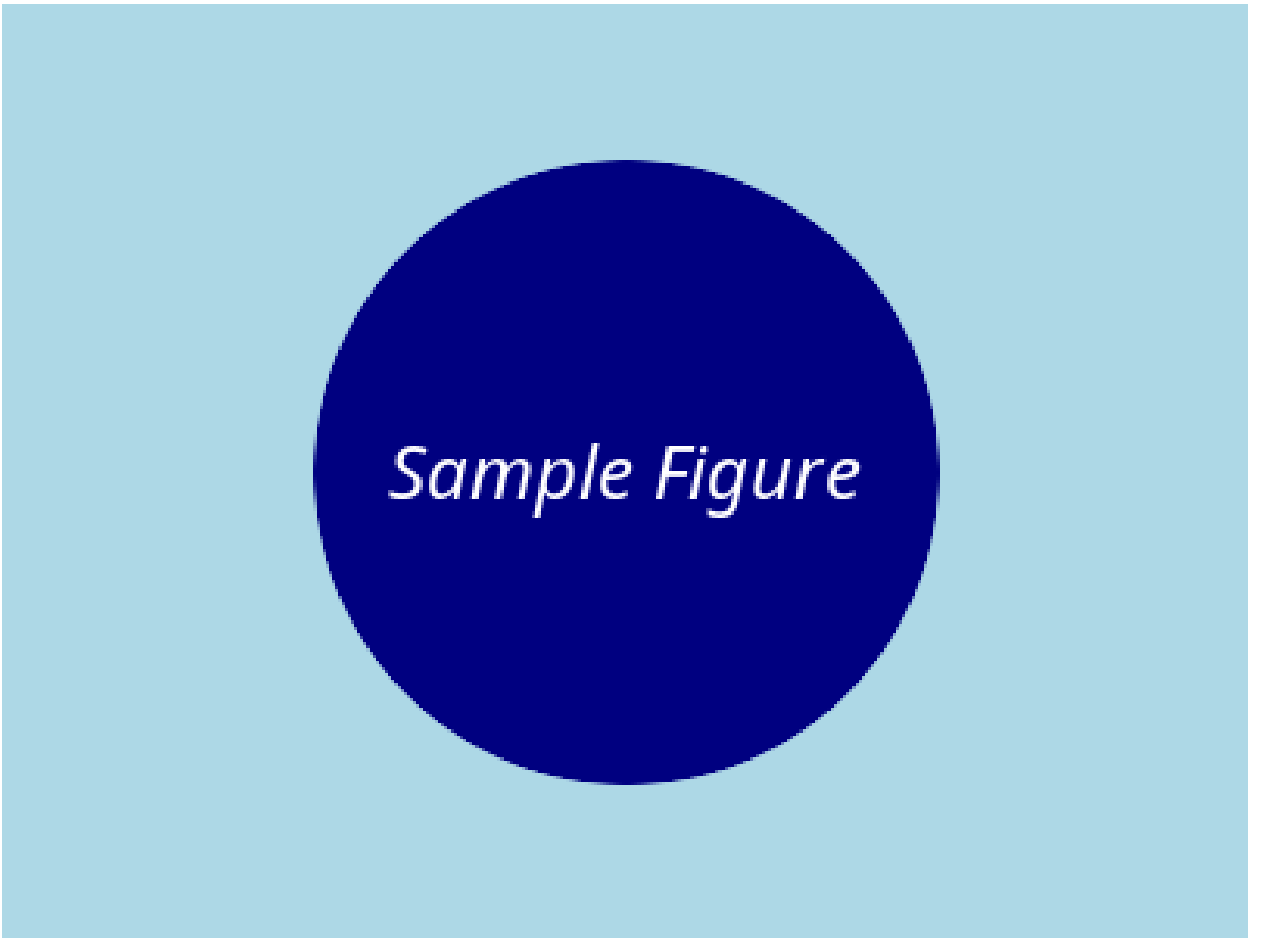
Graphical Abstract

A Sample Article for Elsevier CAS Template

Alan Lujan, Jane Doe



Highlights

A Sample Article for Elsevier CAS Template

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- MyST Markdown enables reproducible scientific writing
- Seamless export to multiple journal formats
- Support for both single and double column layouts

A Sample Article for Elsevier CAS Template

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ABSTRACT

This is a sample article demonstrating the use of MyST Markdown with Elsevier's CAS templates. The template supports both single-column and double-column layouts, making it suitable for various Elsevier journals. We demonstrate the key features including author metadata, affiliations, keywords, and structured content.

1. Introduction

This document demonstrates the integration of MyST Markdown (Cockett, Purvis and others, 2023) with Elsevier's CAS (Content Acquisition System) templates. MyST provides a powerful authoring experience while maintaining compatibility with traditional LaTeX journal requirements (Lamport, 2004).

1.1. Background

Scientific publishing has traditionally relied on LaTeX for high-quality typesetting (Smith and Doe, 2020). However, the learning curve and complexity of LaTeX can be a barrier for many researchers. MyST Markdown bridges this gap by providing:

1. A familiar Markdown syntax based on CommonMark (Gruber, 2004)
2. Rich scientific features (equations, citations, cross-references)
3. Export to multiple formats including PDF via LaTeX

Reproducible research workflows have become increasingly important, with tools like Jupyter Notebooks (Kluyver, Ragan-Kelley and others, 2016) enabling literate programming approaches.

2. Methods

We use the standard CAS template structure provided by Elsevier, adapted for use with the `jtex` templating system.

2.1. Mathematical Content

The templates support full LaTeX math. For example, the quadratic formula:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \tag{1}$$

And inline math like $E = mc^2$.

3. Results

The template successfully renders:

- Author information with ORCID

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ORCID(s): 0000-0000-0000-0000 (A. Lujan)

- Multiple affiliations
- CRediT author contributions
- Keywords
- Abstract and highlights
- Full document content

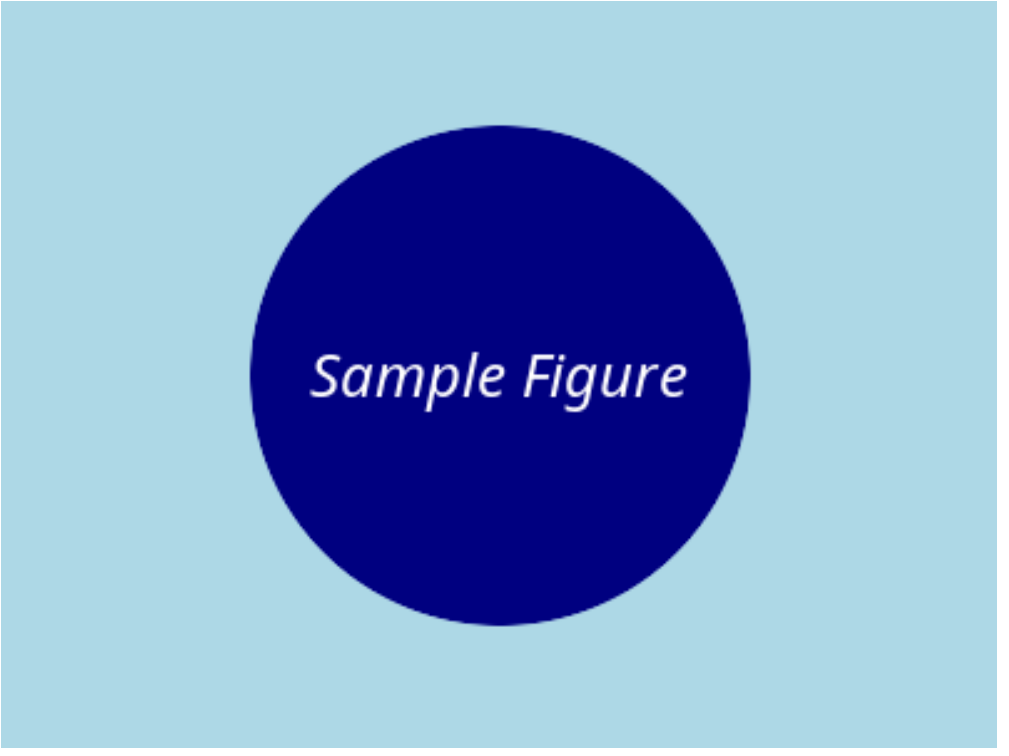

Figure 1: A sample figure demonstrating image support in the template. This figure shows a placeholder image that would typically contain research results or visualizations.

As shown in Figure 1, the template properly handles figure placement and captions.

4. Discussion

This approach enables researchers to write in MyST Markdown while producing publication-ready documents that meet Elsevier's submission requirements.

5. Conclusion

The Elsevier CAS MyST template provides a modern workflow for scientific writing while maintaining compatibility with traditional journal submission systems.

A. Supplementary Methods

This appendix provides additional methodological details that support the main text.

A.1. Data Processing

The data was processed using standard procedures as described in the literature.

B. Additional Tables

Parameter	Value	Unit
Alpha	0.05	-
Beta	1.23	m/s
Gamma	456	kg

CRediT authorship contribution statement

Alan Lujan: Conceptualization, Methodology, Software. **Jane Doe:** Validation, Writing review editing.

References

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