

On Authoring a IACR Communication in Cryptology Quarto Template

Demo Paper

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Abstract. This document is a template demonstrating the IACR Communication in Cryptology Quarto template and some nifty Quarto markup language features.

Keywords: Template · Demo

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1 Introduction

[Quarto](#) is an open-source scientific and technical publishing system. It can create a plethora of different publications from Articles over Websites to E-Books making use of far-reaching capabilities of the [Pandoc](#) markup toolbox. It is neatly positioned to produce journal articles and papers in a streamlined way, going from Markdown files to beautiful finished documents seamlessly without dealing with much [L^AT_EX](#) typesetting.

2 The IACR Communication in Cryptology Template

This Quarto journal template is based on the [IACR Communication in Cryptology document class](#) from the official publishing portal. This Quarto template does not translate all features from the document class. The following are currently not supported:

- Affiliations
- Funding Information

2.1 Authors

A list of authors can be set in the YAML header of the main document:

```
authors:
  - name: First Author
    footnote: "Footnote for First Author"
    surname: "Author"
    email: "first.author@template.local"
```

This structure follows the standardized [author normalization](#) used by Quarto.

2.2 Bibliography

The bibliography typesetting of the `iacrcc` document class is inherited but by default the [Biblatex](#) bibliography is used and created at the end of the document. These behaviors can be changed using the Quarto configurations. It is recommended to use [DBLP](#) or [Cryptobib](#) for bibliographic data.

2.3 Document Customization

Quarto allows for much flexibility and customization when authoring a document. To include additional L^AT_EX packages inside this document append them in the YAML header:

```
iacrcc-header-includes:
  - text: |
      \usepackage{eplain}
      \usepackage{easy-todo}
  - file: packages.tex
  - macros.tex
```

This is a special definition of the header because the default `header-includes` and `include-in-header` directives are not compatible with the `iacrcc` document class, due to issues with the AMS theorem environment creation and settings ¹. More in depth documentation on authoring PDF documents can be found in the [Quarto documentation](#).

¹<https://github.com/orgs/quarto-dev/discussions/13345>

3 Writing Syntax

Standard [Markdown syntax](#) is of course supported. We mention particular interesting Quarto features for academic writing.

3.1 AMS Environments

Using the AMS package that is included by default in the `iacrcc` document class we can add definitions using `{#def-*}` and theorems using `{#thm-*}` environments. And there are more AMS environments defined for which we refer to the documentation for Quarto [theorems and proofs](#).

Definition 1. for defining things

Theorem 1. *for theorizing about things*

3.2 Figures

We can also easily create inline figures using the `LATEXfigure` environment.

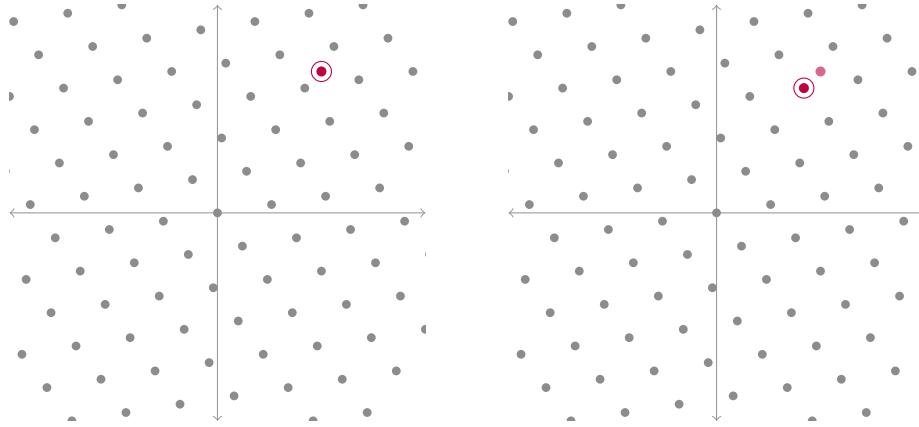


Figure 1: Shortest vector problem [Jea16]

This is enabled by the `{#fig-tikz fig-env="figure*"}` div class. More can be found in the Quarto [authoring figures](#) documentation.

3.3 Cross-References

Furthermore, we can easily reference different Figure 1 or other objects like: Definition 1. These entities need to have the right prefix in their anchor for them to correctly register and assign to the correct type:

- `#sec-*`
- `#fig-*`
- `#lst-*`

For a comprehensive list refer to the Quarto [cross reference](#) documentation.

3.4 Citations

In this template the Biblatex framework of the `iacrcc` document class is reused, so bibliographic entries can be managed in standard `.bib` files see Figure 1. Quarto also provides a rich bibliography management framework implementing direct access to [Zotero](#).

References

- [Jea16] Jérémie Jean. TikZ for Cryptographers. <https://www.iacr.org/authors/tikz/>, 2016.