

**BAN444**

Digital Identity Management: Technology and Applications

Spring Semester 2025

**Paper Title**

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Author 2

Author 3

Date: December 17, 2024

Summary

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Optional: Acronmys

ZKP zero-knowledge proof

Optional: List of Figures and List of Tables

# Introduction

Permissionless blockchains go back to the Bitcoin whitepaper and implementation (Nakamoto, 2008). According to Fridgen et al. (2018), blockchain technology is great for cross-organizational processes. Yet blockchain also comes with challenges (Fridgen et al., 2018; Roth et al., 2022).

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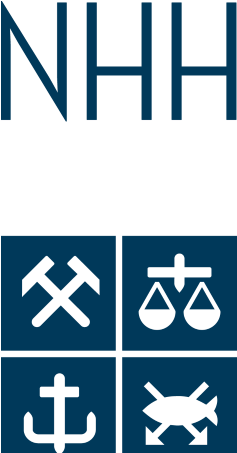


Figure 1: NHH Logo.

# Background

As highlighted in the Introduction Section / Section 1, ...

## Useful commands when writing the paper with LATEX

For a template, visit <https://www.overleaf.com/read/xwhrcxycrsmh> or see the zip file.

If you write the paper with MS Word, consider using reference management software that provides a Word plugin, e.g., Citavi. For LaTeX, one can use Biblatex directly or use tools like Zotero.

Zero-knowledge proofs (ZKPs) are important. A ZKP is defined via ... We use ZKPs in ...

## Including figures

Figures can be cropped conveniently. One can link to them conveniently; see Figure 3. Vector images are preferred. One good approach is making the Figures in Powerpoint, exporting them as pdf (multiple pages), uploading them as Figures.pdf and then use \includegraphics[page=1, width=..., trim=..., clip]{Figures.pdf}. This avoids the need to upload many individual figures. For instance, I uploaded the File Zero-Knowledge Proofs.pdf and will include the first and third page in the following two figures.



**Bonus topic:**

**Zero**

**-**

**Knowledge Proofs**

Figure 2: First page of the presentation.



45

**Zero**

**-**

**knowledge**

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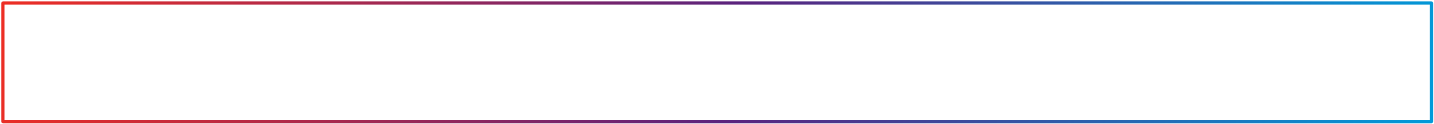
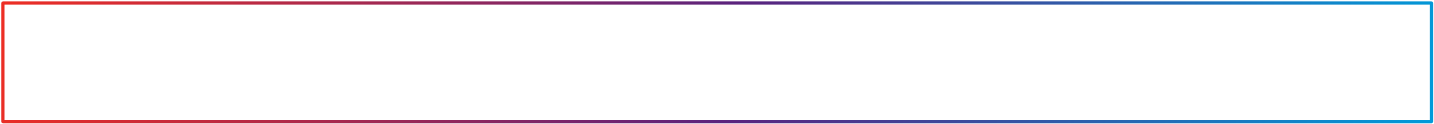
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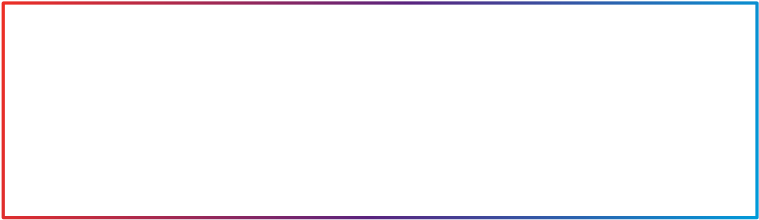
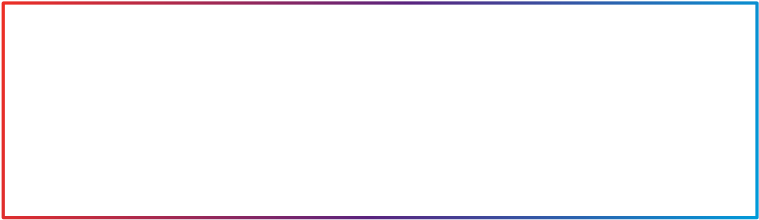
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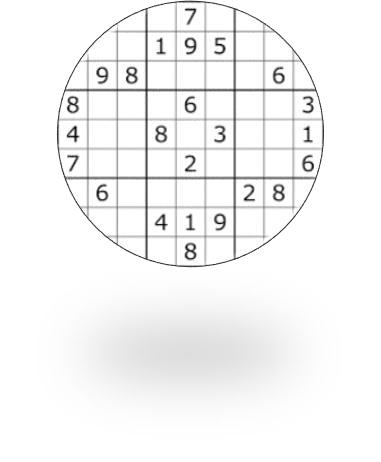
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**Examples**

**:**



Proof

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knowledge

of

a

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Sudoku puzzle,

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Proof

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of

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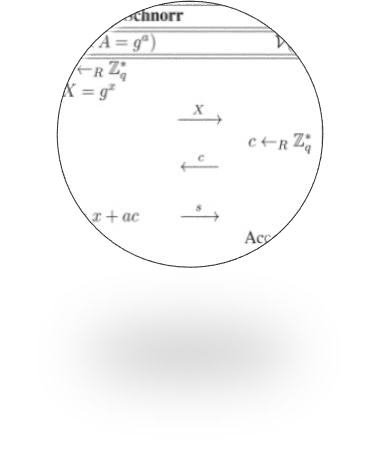
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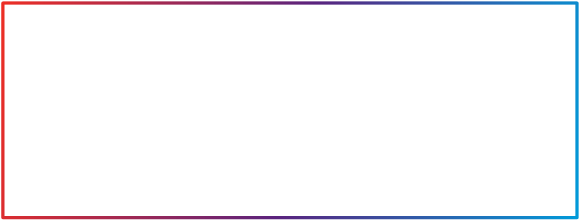
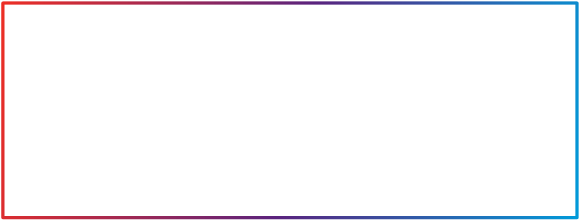


Figure 3: Third page of the presentation.

## Including tables

Use [H] to place the table at exactly this place. Use [h] to place it at this place if suitable. Most of the time, [!tb] will be better, then it is placed at the top or bottom of a page nearby. Refer to table via Table 1.

|  |  |
| --- | --- |
| A | B |
| C | D |

Table 1: My table caption.

References

Fridgen, G., Radszuwill, S., Urbach, N., & Utz, L. (2018). Cross-organizational workflow management using blockchain technology – towards applicability, auditability, and automation. *Proceedings of the 51st Hawaii International Conference on System Sciences*, 3507–3516. <https://doi.org/10.24251/hicss.2018.444>

Nakamoto, S. (2008). Bitcoin: A peer-to-peer electronic cash system. Retrieved April 17, 2023, from <https://bitcoin.org/bitcoin.pdf>

Roth, T., Utz, M., Baumgarte, F., Rieger, A., Sedlmeir, J., & Struker, J. (2022). Electricity powered¨ by blockchain: A review with a European perspective. *Applied Energy*. [https://doi.org/10.](https://doi.org/10.1016/j.apenergy.2022.119799)

[1016/j.apenergy.2022.119799](https://doi.org/10.1016/j.apenergy.2022.119799)