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**mitiq**

***Release 0.1.0***

**Tech Team @ Unitary Fund**

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## Contents:

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<b>1</b>	<b>Change Log</b>	<b>1</b>
1.1	Version 0.1.0 (Date) . . . . .	1
<b>2</b>	<b>Users Guide</b>	<b>3</b>
2.1	Overview of mitiq . . . . .	3
2.2	Zero Noise Extrapolation . . . . .	3
<b>3</b>	<b>Indices and tables</b>	<b>5</b>



# CHAPTER 1

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## Change Log

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### 1.1 Version 0.1.0 (Date)

- Initial release.



## 2.1 Overview of mitiq

Welcome to *mitiq* Users Guide. The library allows to postprocess results from quantum circuits with both analog and digital techniques, interfacing with a variety of quantum circuit libraries.

## 2.2 Zero Noise Extrapolation

### 2.2.1 Introduction

Zero noise extrapolation (ZNE) was introduced concurrently in Ref. [1] and [2]. With *mitiq.zne* module it is possible to extrapolate what the expected value would be without noise. This is done by first setting up one of the key objects in *mitiq*, which is a `mitiq.Factory` object.

### 2.2.2 Importing Quantum Circuits

*mitiq* allows one to flexibly import and export quantum circuits from other libraries. Here is an example:

```
>>> from mitiq import Factory
```





## CHAPTER 3

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### Indices and tables

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- `genindex`
- `modindex`
- `search`