## Lecture 1: Out of the Mire

Every demonstrable science must start with indemonstrable principles. Otherwise the steps of demonstration would be endless

Aristotle

The Mire
Euclid's Elements
Foundational Crisis
Hilbert's Program

Further content from the first lecture.

 $\textbf{Definition 1} \ (\text{Turing Machine}) \ \ \text{This is a Turing Machine}$ 

Thanks to [1] for writing an interesting book.

## References

[1] Joel David Hamkins. Lectures on the philosophy of mathematics. The MIT Press: Cambridge, Massachusetts, 2020.