Part III Advanced Probability

Based on lectures by P. Sousi

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1 Proof of the Riemann Hypothesis

Lecture 1 We start with setting up some notation.
note the margins are narrow.

$$\int_a^b f \, \mathrm{d}\mu \tag{1}$$

2 Proof of Collatz Conjecture

$$\sum_{n \in \mathbb{N}} a_n \tag{2}$$

In other words, the following diagram

$$\begin{array}{ccc} X & \xrightarrow{\quad T \quad} & Y \\ \big\downarrow{\scriptstyle \iota_X} & & \big\downarrow{\scriptstyle \iota_Y} \\ X^{**} & \xrightarrow{\quad T^{**} \quad} & Y^{**} \end{array}$$

commutes (vertical arrows are canonical embeddings).

(a) Illustration of lemma **??**.

(b) Illustration of lemma **??**.

Figure 1