

BILL, RECORD LECTURE!!!!

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Computable Ramsey Theory

Exposition by **William Gasarch**

February 18, 2025

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We will refine and ask this question later.

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We will define terms and see what we can say.

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One can define Σ_i, Π_i .

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COF is all e such that M_e halts on almost all inputs.

$\text{COF} \in \Sigma_3 - \Pi_3.$ (The proof that $\text{COF} \notin \Pi_3$ is not easy.)

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For all $i \geq 1$, Σ_i and Π_i are incomparable.

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- 5) H is not in the arithmetic hierarchy.

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