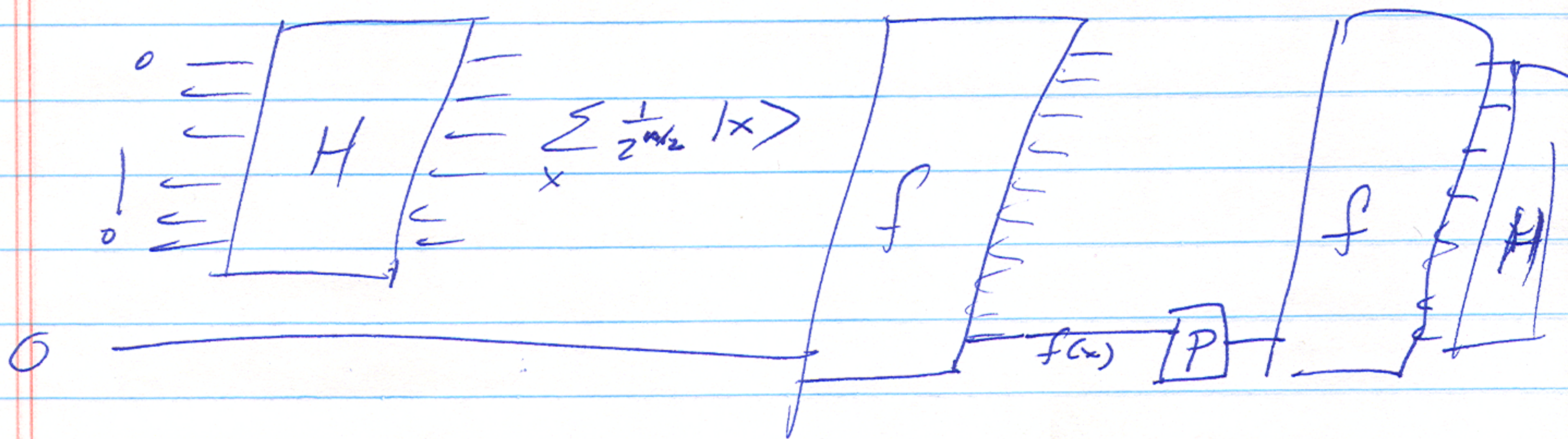


Evidence??

Deutsch-Jozsa:

$$f: \{0,1\}^n \rightarrow \{0,1\}$$

either balanced or constant. Which?



$$\sum_x (-1)^{f(x)} |x\rangle$$

if ~~balanced~~ constant then $|0^n\rangle$.

otherwise

$$\sum_x \alpha_x |x\rangle \rightarrow \frac{\sum \alpha_x}{2^{n/2}} |0^n\rangle$$

\therefore no chance of 0^n .

But \in BPP