



Detekcija kvantne uvezanosti korišćenjem POVM merenja sa primenom u komunikacionim protokolima

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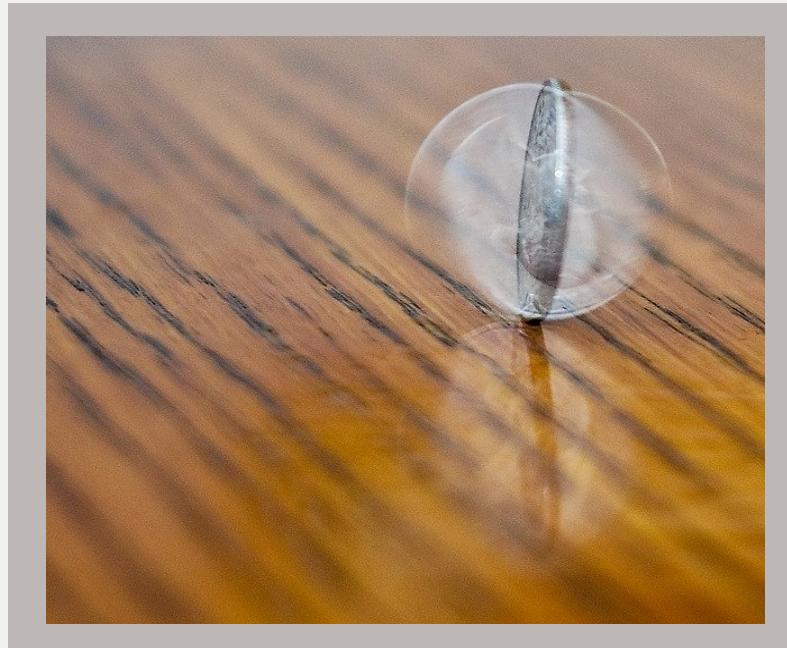
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QUBIT

- **U klasičnim kompjuterima koriste se *bitovi***
- **Kvantni bit = qubit**
- **Stanje 0 i stanje 1 sa određenom verovatnoćom**



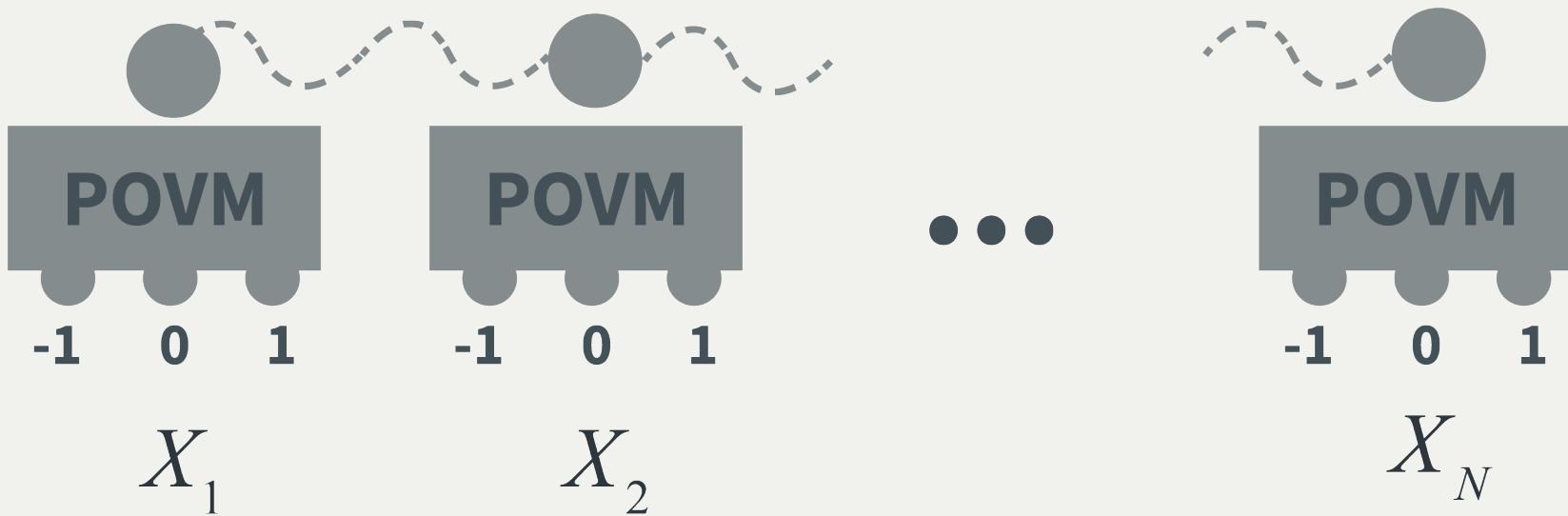
UVEZANOST

- Uvezanost (engl. entanglement)
- Uvezana i separabilna (pojedinačna) stanja

POVM

- Svako kvantno merenje menja stanje sistema
- Najopštija vrsta merenja u kvantnoj mehanici
- Simulacija

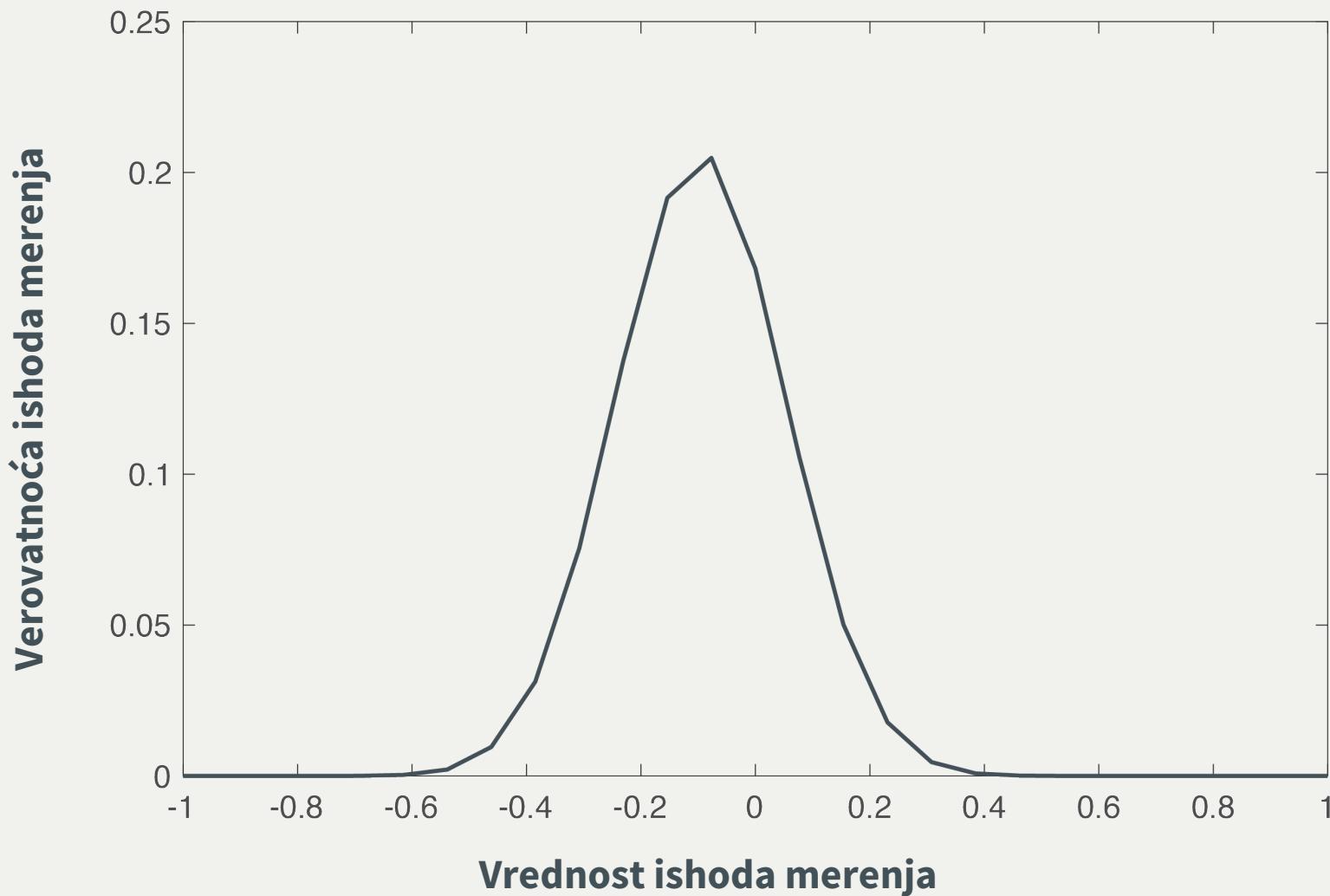
METOD



$$X = \frac{X_1 + X_2 + \dots + X_N}{N}$$

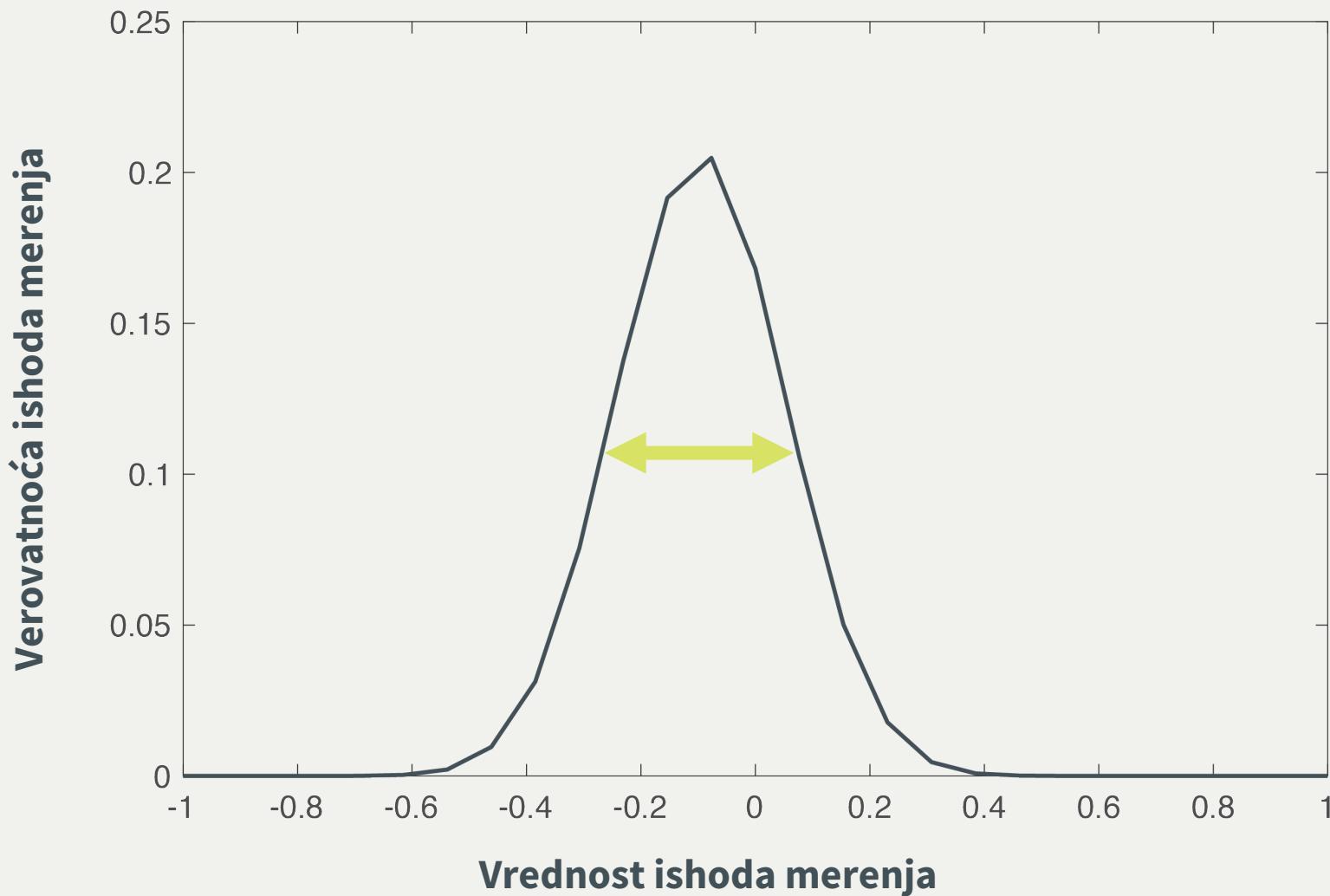
REZULTATI

Separabilna stanja



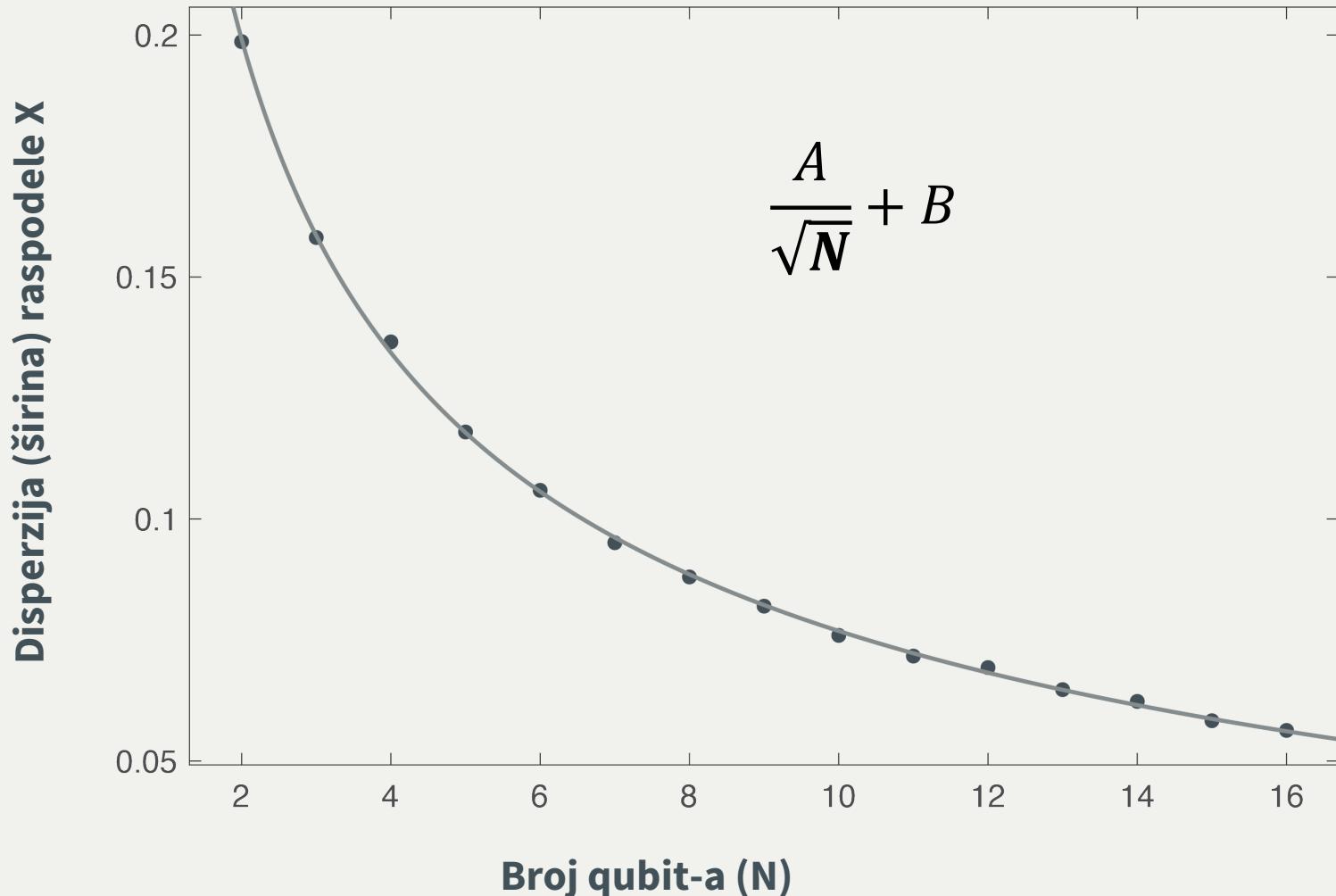
REZULTATI

Separabilna stanja



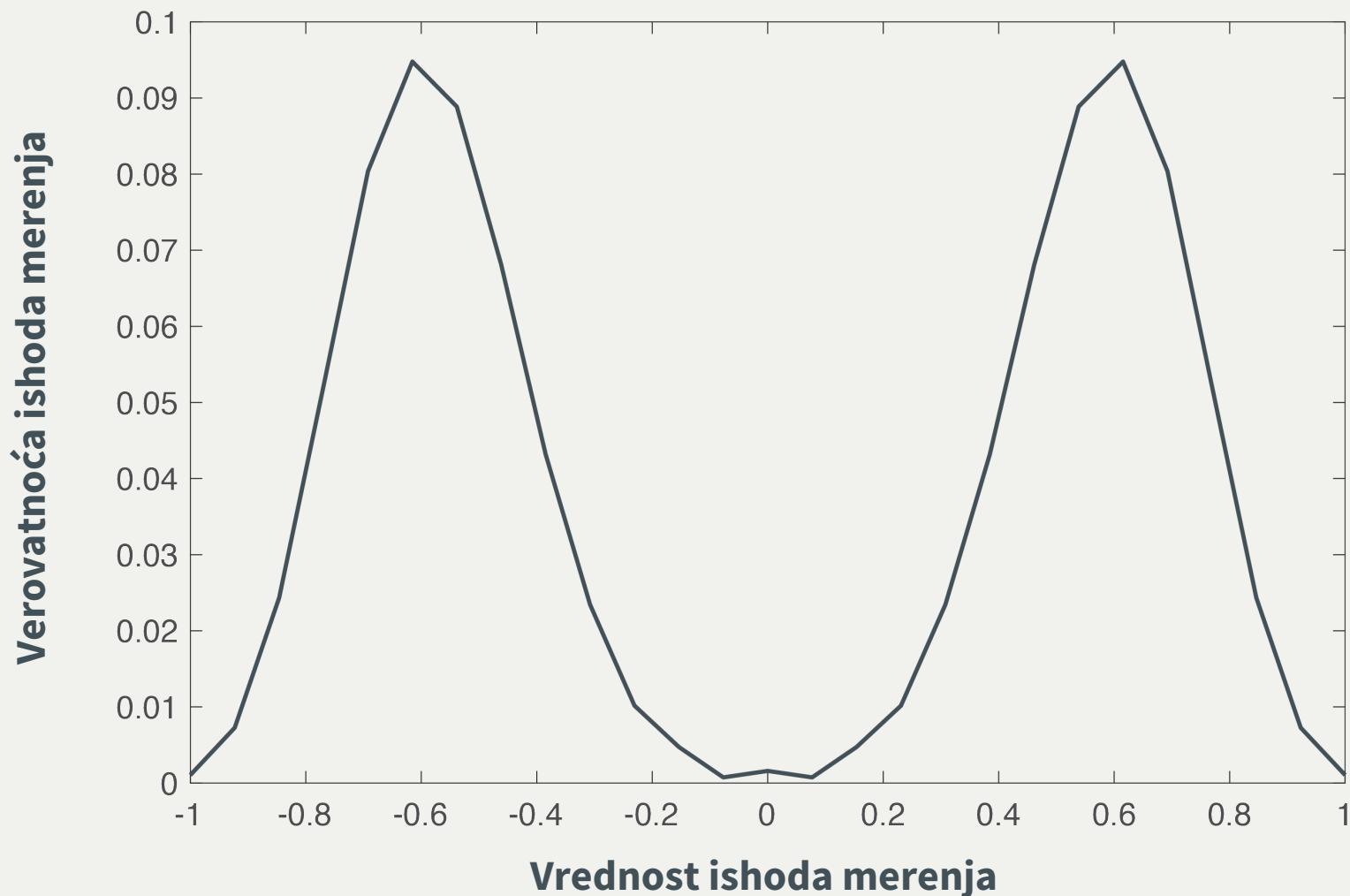
REZULTATI

Separabilna stanja



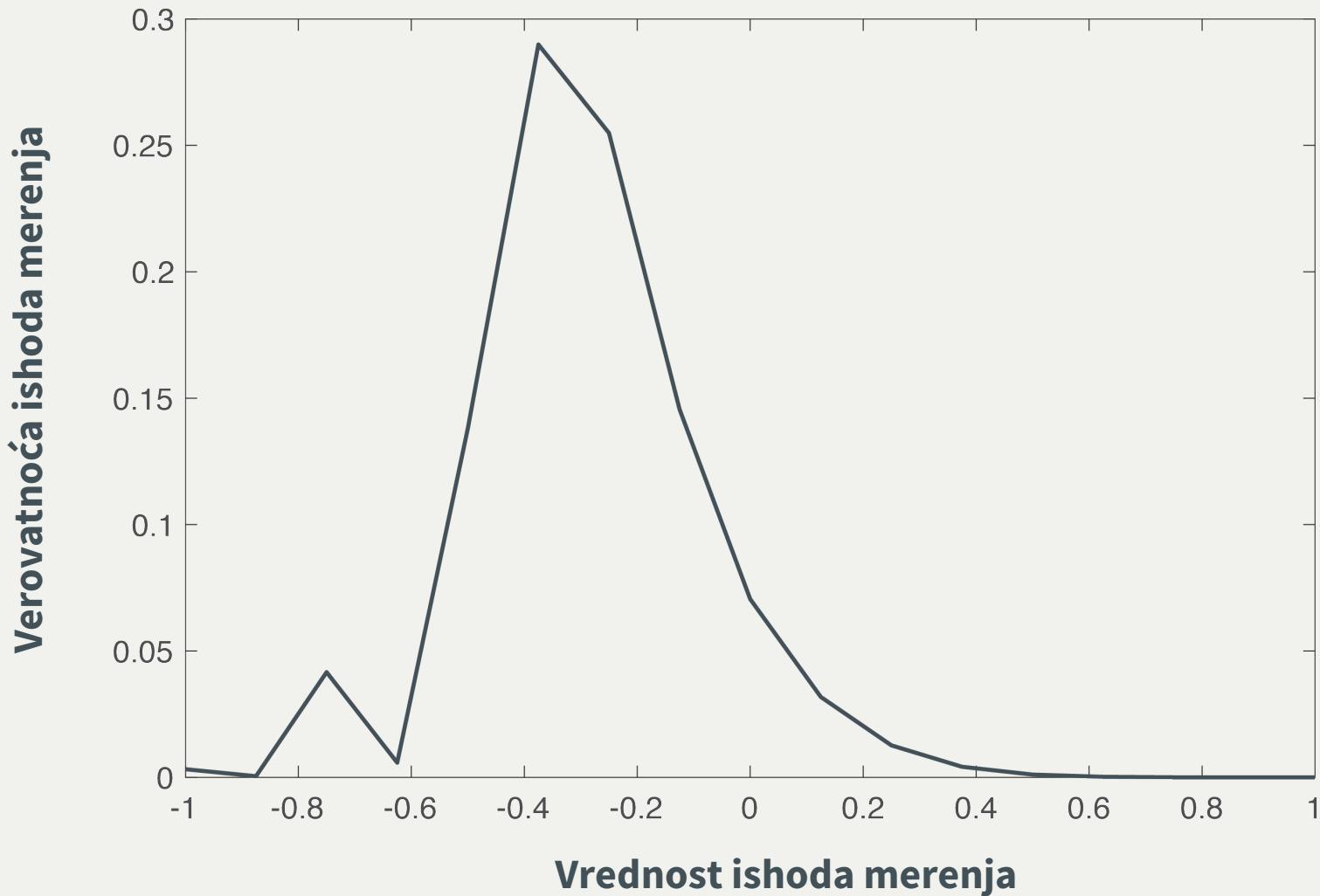
REZULTATI

GHZ uvezano stanje



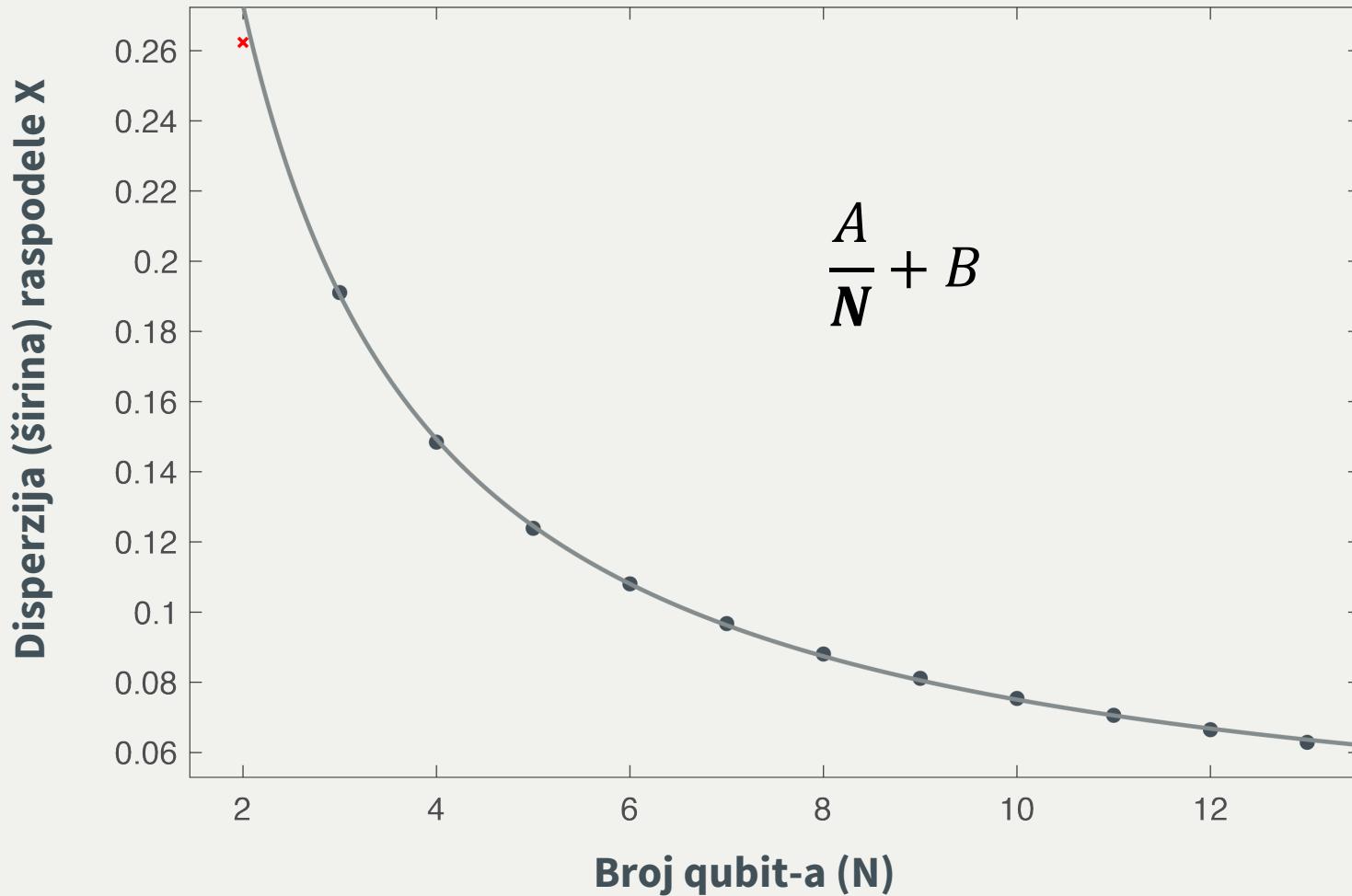
REZULTATI

Dicke uvezano stanje

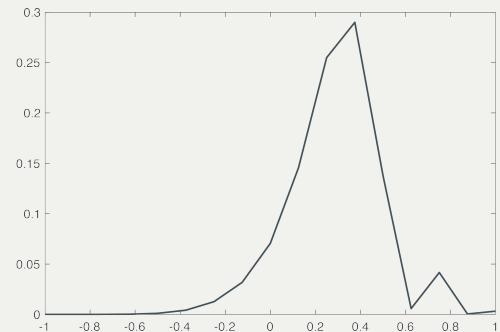
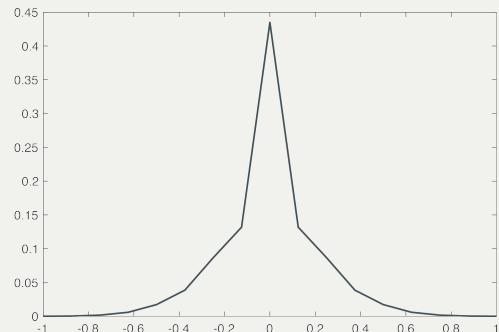
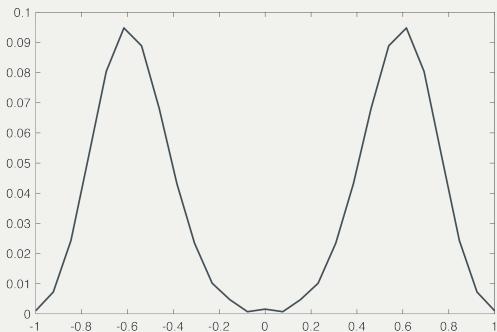


REZULTATI

Uvezana stanja



ZAKLJUČAK



Izgled raspodele



Klasifikacija

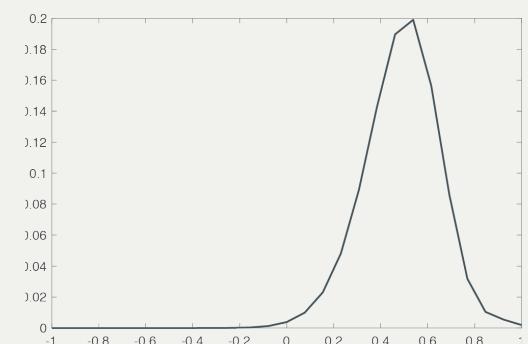
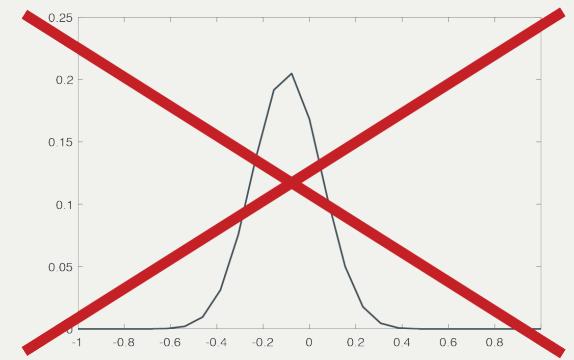
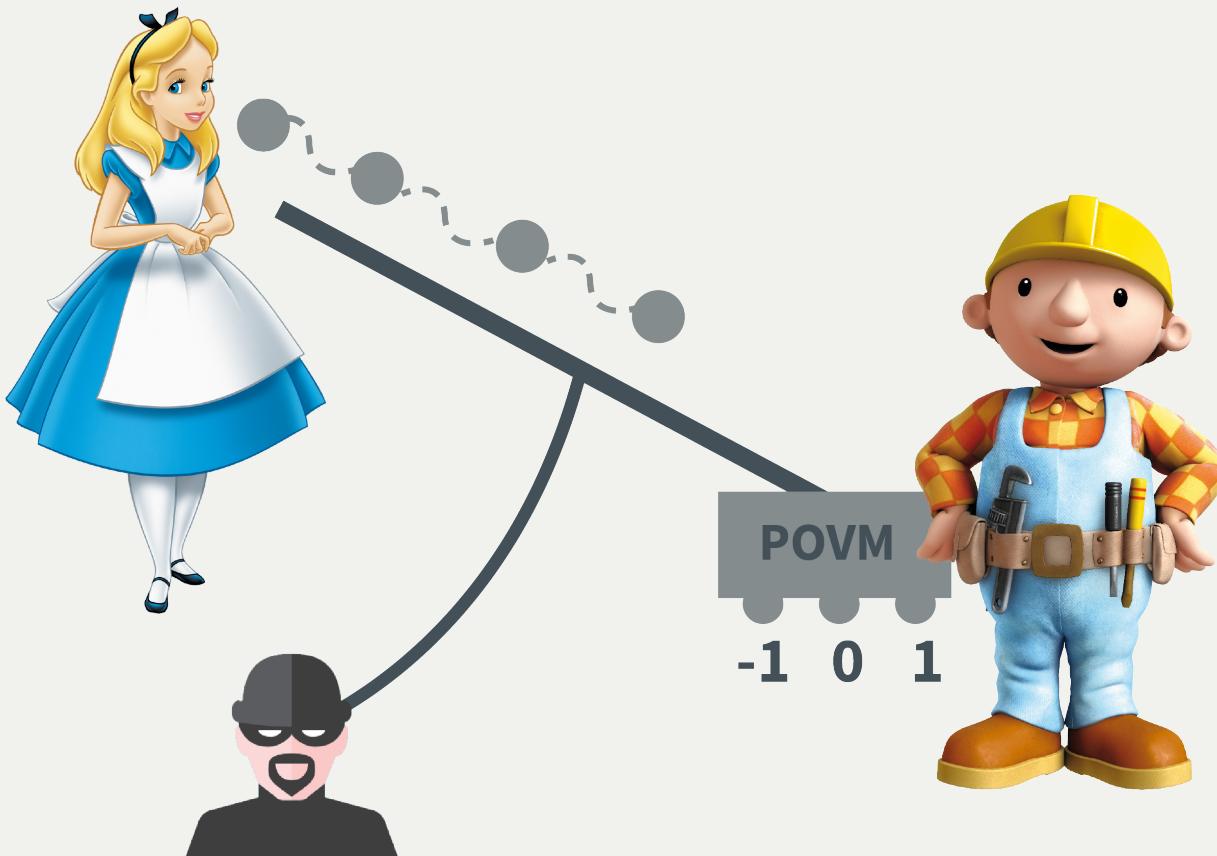
$$\frac{A}{\sqrt{N}}$$

Separabilna stanja

$$\frac{A}{N}$$

Uvezana stanja

KOMUNIKACIONI PROTOKOL



HVALA NA PAŽNJI!