## NPFL 054 <br> Entry test in probability and statistics

March 2021

## Students and questions

- 24 students took the test (online form, 12 questions, 25 minutes)
- $63 \%$ stated they have passed a course in probability/statistics at MFF UK
- $25 \%$ stated they have not passed any university course in probability/statistics
- $21 \%$ stated they used some auxiliary material or information source during the test
- 12 test questions on
- simple probability calculating (1)
- conditional probability (4)
- joint probability (4)
- statistical independence (1)
- binomial distribution (1)
- sample mean and sample median (1)


## Evaluation

- Maximum score = $\mathbf{1 2}$ points
- 12 questions equally scored, each by 1 point
- Painful gaps in knowledge
- conditional probability and statistical independence - less than 50\% of answers correct
- also in simple probability calculating (rolling a die) your answers were often wrong
- Important! - your knowledge of probability and statistics should be practical
- you should be able to apply your theoretical knowledge in practical exercises

Entry test — total points sorted
excellent $\geq 11$
$\operatorname{good} \geq 8$
weak $\geq 5$
poor < 5

Entry test in probability and statistics - distribution of correct answers



## Questions

1. Calculating probability
2. Binomial distribution
3. Sample mean and median
4. Joint probability
5. Conditional probability and statistical independence

## Percentage of correct answers

Depending on the previous course in probability/statistics at MFF


