



Erasmus+

Immanuel-Kant-Gymnasium Berlin

INNOMATH -

Innovative enriching education process for Mathematically Gifted Students in Europe

Kick off Meeting

1-2 October 2019

Oliver Kaufmann

Facts about Immanuel-Kant-Gymnasium

- Grammar school with grades 5 to 12
- About 820 pupils and more than 70 teachers
- Popular school in the east of Berlin
- Since 1904





**BERLINER
NETZWERK**

mathematisch-
naturwissenschaftlich
profilerter Schulen

Member in network

- Since 2001: member of the network “Berliner Netzwerk mathematisch-naturwissenschaftlich profilerter Schulen”
- Profile classes and regular classes
- Additional courses in grade 9 to 12
- 350 students with a focus on mathematics and the natural sciences
- Delegate teachers at Humboldt-Universität zu Berlin



**BERLINER
NETZWERK**

mathematisch-
naturwissenschaftlich
proflierter Schulen

Profile classes at IKG

- Profile classes for mathematics and the natural sciences
- Start in grade 5 and 7
- One additional hour per week
- Enriched curriculum in mathematics

understanding and developing mathematical structures, argumentation and proofs e.g.:

- set theory (grade 7)
- propositional logic (grade 8)
- absolute value function and equation (grade 9)
- sequences and limits (grade 10)
- ...



**BERLINER
NETZWERK**

mathematisch-
naturwissenschaftlich
proflierter Schulen

Additional courses at IKG

- Optional courses with start in grade 9
- Improve mathematical skills
- Curriculum with mathematical structures and proofs:
 - geometry (grade 9)
 - algebra and number theory (grade 10)
 - analysis (grade 11)
 - linear algebra (grade 12)
- Credit points for the first semester of university education



**BERLINER
NETZWERK**

mathematisch-
naturwissenschaftlich
proflierter Schulen

Delegate teachers

- “Bridge” between mathematics in school and university
(e.g. optional courses for the lecture “Analysis”)
- Regular delegations for one year
- Enrich the education of students in the teaching degree
(e.g. in didactics courses)
- Advanced training in mathematics and mathematics education
- Cooperation on the advent calendar of mathematics