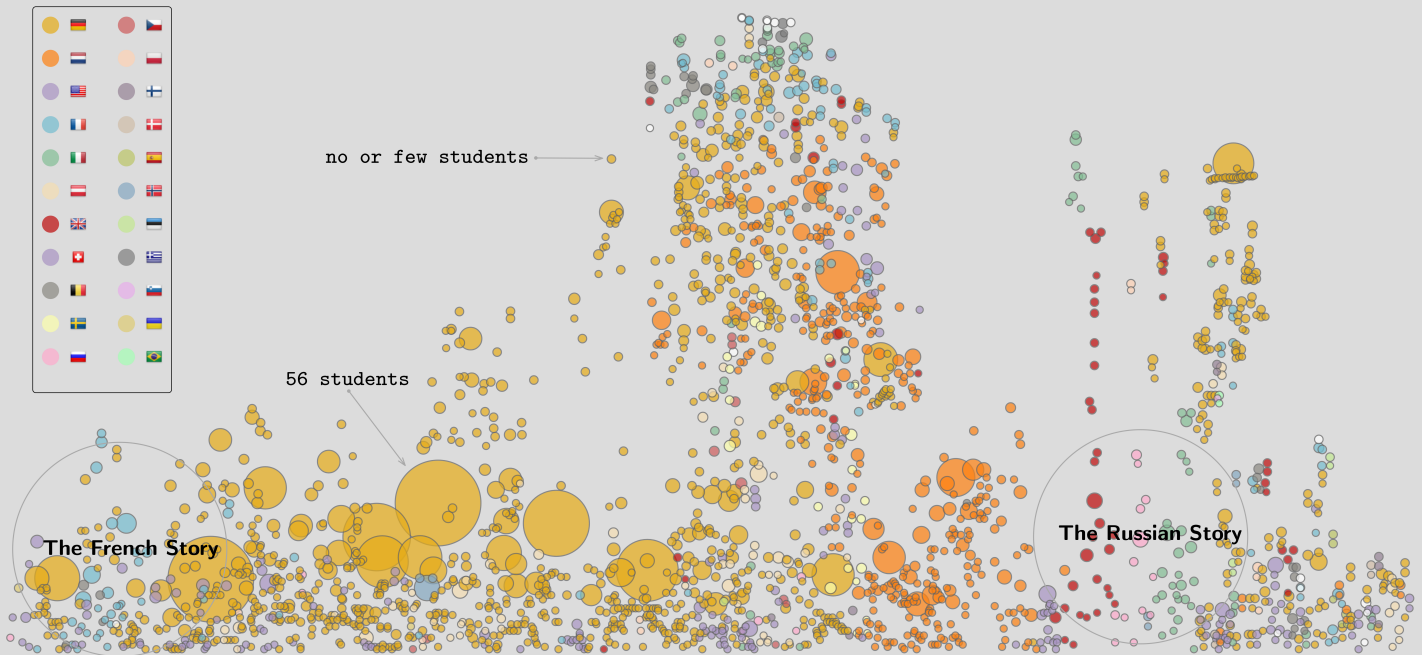# MATHEMATICS GENEALOGY

An online interactive tool to investigate advisor-advisee relationships collected
by the Mathematics Genealogy Project between 1300 and 1900.

`https://mathematics-genealogy.de`

no or few students

56 students

The French Story

The Russian Story

Georgy Fedoseevich Voronoy

Advisors

Andrei Andreyevich Markov · 1896

Chebyshev

Markov

Voronoy

Lagrange

Laplace

Poisson

Dirichlet

The Russian Story

Georgy F. Voronoy (1868-1908) is known for **Voronoy diagrams**: given a set of sites, the diagram provides a subdivision of the plane into cells such that points are contained in the one corresponding to the site that is closest to them.

Voronoy graduated in Russia in 1896 and was advised by **Andrei A. Markov** (1856-1922) who did research on so-called **Markov chains** to model a stochastic process where the next step only depends on the current state. Markov also wrote his Ph.D. in Russia in 1884 and was supervised by **Pafnuty L. Chebyshev** (1821-1894) who is also a famous mathematician.

In the other direction we could continue that story with students of Voronoy, e.g. **Boris Delaunay** or **Waclaw Sierpiński**, who graduated after 1900.
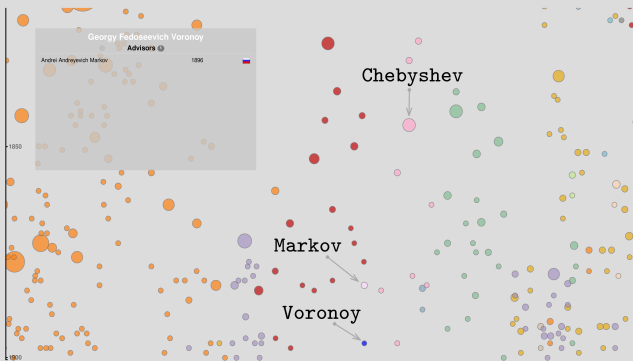
The French Story

In France, some years earlier, there lived and worked **Pierre-Simon Laplace** (1749-1827). One might know him from his formula for calculating determinants.

His advisor was **Joseph-Louis Lagrange** (1736-1813), who proved the theorem that the order of a subgroup H of G must divide the order of G and other significant results for Algebra and Number Theory.

The other famous student of Lagrange was **Siméon D. Poisson** (1781-1840), who supervised **Gustav P. L. Dirichlet** (1805-1859). Dirichlet contributed important parts to the proof of Fermat's last theorem, which says that no positive integers a, b, c satisfy

$$a^n + b^n = c^n, \text{ for any } n \geq 2.$$
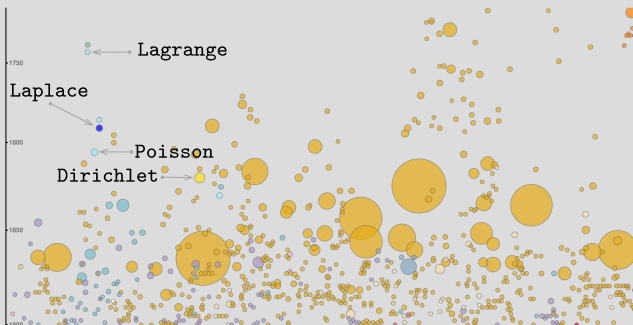
Curious Facts

- Napoleon Bonaparte was a student of Laplace, but did not graduate.

- The mathematicians who supervised as many as 56 students are **Christian Felix Klein** and **Ernst Eduard Kummer**. Number three in the ranking is **Wilhelm Scheibner** with 43 descendants, followed by **Karl Theodor Wilhelm Weierstraß** with 42 descendants.

- More than half of the mathematicians in the data set did not supervise any student.

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