Gustav Adolph Goepel 1812-1847 Mathematician

Adolph Göpel's father Johann Andreas Goepel was a teacher of music in Rostock and Adolph inherited from him considerable musical talent. He had an uncle (Adolph Petri, a brother of his mother) who was the British consul in Corsica. This enabled Göpel to spend several years in Italy in his youth for, from the age of ten, he travelled around Italy with this uncle who was taking an interest in science. His uncle moved between Italian cities spending some time in each city as his work required. Although he was only 13 years old at the time, Adolph attended mathematics and physics lectures at the University of Pisa during the winter of 1825-26, while his uncle was there on business. At Pisa he was taught algebra, differential calculus, statics, analytical mechanics, theoretical physics and experimental physics. His lecturers included Giovanni Pieraccioli, Poletti, Ranieri Gerbi and Giuseppe Gatteschi. He returned to Rostock in 1827 where he spent two years studying at the local Gymnasium

In 1829 Göpel entered the University of Berlin where, in addition to his main area of study which was mathematics, he also took classes in physics, chemistry, and even philosophy, philology, history and aesthetics. He continued to undertake research in mathematics after taking his first degree and he was awarded a doctorate in 1835 for his thesis De aequationibus secundi gradus indeternatis. He had been advised at the University of Berlin by Enno Heeren Dirksen (1788-1850) who had, a few years before, been thesis advisor to Carl Jacobi. After completing his studies at the University, Göpel taught at the Werder Gymnasium and at the Royal Realschule. He then worked as an official in the Royal Library of the Humboldt University of Berlin and had little contact with his mathematical colleagues although, for a while, he was friendly with August Crelle. There seems to be little further information about Göpel's life. The authors were Carl Jacobi and August Crelle; Jacobi certainly was very familiar with Göpel's mathematics but only Crelle knew him personally. An encyclopaedia entry for Göpel in the Allgemeine deutsche Biographie (1879), written by Moritz Cantor, closely follows the biographical information given.

Göpel's doctoral dissertation studied periodic continued fractions of the roots of integers and derived a representation of the numbers by quadratic forms He wrote on <u>Steiner</u>'s synthetic geometry and an important work, published after his death, continued the work of <u>Jacobi</u> on elliptic functions. This work was published in <u>Crelle</u>'s Journal in 1847.