

Joseph Louis Lagrange

Italian-French Astronomer and Mathematician

Born: Turin, Piedmont, Italy, Jan 25, 1736. Died: Paris, France April 10, 1813

Lagrange was of French ancestry although born in Italy. His parents were wealthy although his father had lost most of the fortune. The youngest of eleven children, he was the only one to survive to adulthood. Wow, when you think about that last statement, that is an incredible death rate! 10 died, 1 lived. At school, he came across an essay by Edmund Halley on calculus, and he was immediately converted to mathematics. Another interesting statement. As I write these mini-biographies, I am astounded by how many of these mathematicians, and scientists, got the “hook” by being exposed to one book, or one teacher, or one relative, etc. Maybe we shouldn’t be too surprised, as that is maybe how most of us get “hooked” on a life-time pursuit. Anyway, by 18 he was teaching Geometry at the Royal Artillery School in Turin, where he organized a discussion group that later became the Turin Academy of Sciences in 1758.

Lagrange’s mathematical ability was discovered by Leonard Euler, when he was sent a paper by Lagrange. Although working on the same topic, Euler held back his own work to allow Lagrange to publish first. When Euler moved to Russia, he recommended Lagrange to take his place as head of the Berlin Academy. He became this head at age 40. Lagrange’s contribution to mathematics was in mechanics, where he used calculus to work out many of the outstanding theorems in mechanics and published his book, *Analytic Mechanics*, in 1788.

In astronomy, Lagrange extended Newton’s gravitational laws to more than two bodies. Lagrange moved to Paris in 1787, and there, started into many bouts of depression. Although friends of the Royal Family, he was spared throughout the French Revolution because of his work, and his foreign birth. In 1793 to 1795, Lagrange was on the commission that produced the metric system. Napoleon made Lagrange a count.

I have used Isaac Asimov’s *Biographical Encyclopedia of Science*, in producing this information. A quick google search yields many more references.