

The Marquis de l'Hospital

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Figure 1: Marquis de L'Hospital

Guillaume François Antoine de L'Hospital, Marquis de Sainte-Mesme and Comte d'Entremont was born in 1661 and was foremost among the French nobility intrigued by the developments of calculus. In 1691, Johann Bernoulli visited Paris and explained the new calculus in a series of public lectures that continued into 1692. L'Hospital hired him as a private tutor over a period of four months.

In March of 1694, L'Hospital wrote to Bernoulli, then back in Basel, offering him an annual pension of 300 *livres* in exchange for help with mathematical questions and a promise to send to L'Hospital mathematical results which L'Hospital could then publish under his own name. What today we call L'Hospital's rule was sent by Bernoulli to L'Hospital later that year. In 1696, L'Hospital published the very first book on calculus, *Analyse des infiniments petits, pour l'intelligence des lignes courbes*, which

Fred Rickey has translated as *Analysis of the Little-Bitty-Guys for the Study of Curved Lines*. Here is the first recorded mention of what today we call L'Hospital's rule. Bernoulli's lectures from 1691–92 would be published in 1922, revealing that much of L'Hospital's book was first discovered by Bernoulli. In fact, after L'Hospital's death in 1704 with Bernoulli now freed from his contract, he laid claim to L'Hospital's rule as his own result.

Not even the historians of mathematics are agreed on how to spell his name. On at least one of his letters, he spelled his name Lhospital (without the apostrophe and with a lower case h), but people did not spell their names consistently back then (think of Shakespeare). On his calculus book, it is spelled l'Hospital (lower case l). The official French national bibliographic entry is L'Hospital, which is what most historians choose. Today, the French word for hospital is spelled “hôpital”. The mark over the o is called a circumflex. It is used denote a missing s. While there is no evidence that L'Hospital ever spelled his name with a circumflex or without the s, many mathematicians prefer this spelling because the s, even if written, would not have been pronounced.