

# Carl Hierholzer

**Carl Hierholzer** (2 October 1840 – 13 September 1871<sup>[1]</sup>) was a German mathematician.

## Biography

Hierholzer studied mathematics in Karlsruhe, and he got his Ph.D. from Ruprecht-Karls-Universität Heidelberg in 1865. His Ph.D. advisor was Ludwig Otto Hesse (1811–1874). In 1870 Hierholzer wrote his habilitation about conic sections (title: *Ueber Kegelschnitte im Raum*) in Karlsruhe, where he later became professor.

Hierholzer proved that a graph has an Eulerian cycle if and only if it is connected and every vertex has an even degree (excluding the starting and terminal vertices). This result had been given, without proof, by Leonhard Euler in 1736. Hierholzer apparently explained his proof, just before his premature death in 1871, to a colleague who then arranged for its posthumous publication which appeared in 1873.<sup>[1]</sup>

## References

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