

1128-35-163

**Victor Ivrii\***, Department of Mathematics, University of Toronto, 40 St. George St., Toronto, ON M2N 4V4, Canada. *100 Years of Weyl's Law*.

In 1911-1912 Hermann Weyl published 2 papers (more followed) describing distribution of eigenvalues of Dirichlet Laplacian in the bounded domain. These were one of the first Weyl's publications and the new exciting field of mathematics has been created. I will discuss:

- Weyl's law with sharper remainder estimates (in particular, Weyl conjecture); - Generalized Weyl's law; - When generalized Weyl's law works and when it does not and how it should be modified; - What should be used instead of eigenvalue counting function when the spectrum is not necessarily discrete; - Weyl's law and Thomas-Fermi theory. (Received February 24, 2017)