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Nota di contenuto

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Sommario/riassunto

In theoretical physics, theoretical chemistry and engineering, one often wishes to solve partial differential equations subject to a set of boundary conditions. This gives rise to eigenvalue problems of which some solutions may be very difficult to find. For example, the problem of finding eigenfunctions and eigenvalues for the Hamiltonian of a many-particle system is usually so difficult that it requires approximate methods, the most common of which is expansion of the eigenfunctions in terms of basis functions that obey the boundary conditions of the problem. The computational effort needed

