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Titolo	An Introduction to the Numerical Analysis of Spectral Methods [[electronic resource] /] / by Bertrand Mercier
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Sommario/riassunto	This is a very lucid introduction to spectral methods emphasizing the mathematical aspects of the theory rather than the many applications in numerical analysis and the engineering sciences. The first part is a fairly complete introduction to Fourier series while the second emphasizes polynomial expansion methods like Chebyshev's. The author gives rigorous proofs of fundamental results related to one-dimensional advection and diffusions equations. The book addresses students as well as practitioners of numerical analysis.