

**IAU COLLOQUIUM 139**

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**New Perspectives on  
Stellar Pulsation and  
Pulsating Variable Stars**

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**EDITED BY JAMES M. NEMEC  
and JAYMIE M. MATTHEWS**

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How can the interior of the Sun, white dwarfs and other stars be studied by stellar seismology? What can Doppler imaging tell us about high-degree pulsations? What impact are CCD and infrared observations having on extending the Cepheid and RR Lyrae distance scale? And how are the other classes of pulsators providing independent checks of the distance scale? These and many other critical questions are answered in this timely review of the dramatic advances made in pulsating star research in the last decade.

This survey collects together more than thirty comprehensive reviews and over one hundred summaries of research papers from the 139th IAU Colloquium, held in Victoria, British Columbia. Together these cover all aspects of recent developments in the field of variable star research and preview some of the exciting advances anticipated for the next decade. This volume provides an essential review for graduate students and researchers.

# **New Perspectives on Stellar Pulsation and Pulsating Variable Stars**

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