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This book gives an account of the proceedings of *International Astronomical Union Colloquium 115, High Resolution X-ray Spectroscopy of Cosmic Plasmas*. This was the first IAU meeting dedicated to high resolution X-ray spectroscopy of objects outside the solar system. A broad range of objects and astrophysical conditions are discussed. Results from the first generation of satellites with spectroscopy capability, i.e. the *Einstein* Observatory, EXOSAT, and *Tenma*, are reviewed from a perspective of a more precise interpretation allowed by improved theoretical models and plasma diagnostics. Laboratory and solar X-ray results that model or are relevant to conditions found in cosmic X-ray sources are also presented.

High resolution spectroscopy is a primary objective of major national and international missions in X-ray astronomy being developed by NASA, ESA, Italy, Germany, Japan, and the Soviet Union. X-ray astronomy missions will account for a substantial fraction of the total resources that the world will devote to space science in the next decade. The colloquium presented an opportunity to discuss the scientific objectives and capabilities of these new missions and new instrumentation.

This is an important book for specialists and students in high energy astrophysics.

*Cambridge University Press is an active publisher of important conferences and symposia in astronomy and astrophysics. Inside the front pages of this book there is a list of titles published recently for the International Astronomical Union.*

*Cover design by Ken Vail*

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