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### **ABOUT THE COVER:**

An overview of the Canadian Penning Trap apparatus. This instrument is used at ATLAS to make precise measurements of the masses of the short-lived nuclei involved in the processes that create the chemical elements in the cosmos. The ion-stopping technology for this trap was a pioneering development that helped lead to the concept for the Rare Isotope Accelerator. The lower left section of the figure is a side view of the ion trap.