G1.9+0.3 is known to the most youngest (~150 yr) SNR in our galaxy. Shock velocity of this SNR shows very high speed (~14,000 km/s). So, hard roll-off energy is expected. In addition, this SNR shows flux increasing of X-ray and radio band. Causes of this feature are considered to be magnetic field amplification and maximum energy evolution of electrons. On the other hand, thermal features are also interesting. Chandra found the broad $^{44}$Sc line in inner region of this SNR. This elements are produced by electron capture of $^{44}$Ti. So, we can discuss nucleosynthesis by this target. Using ASTRO-H, we can argue that all of these science themes.

### Expansion velocity of Heavy Elements

Chandra found broad lines of several elements. Using SXS, we can determine element’s velocity by investigating doppler shift with high precision. In addition, we can discuss difference of shock velocity due to each elements and/or each region.

### Distribution of $^{44}$Sc & $^{44}$Ti

Recently, distribution of $^{44}$Ti of Cassiopea A showed with Nustar. G1.9+0.3 also showed a possibility of existence of this element. Using SXS and HXI, we may be able to discuss distribution of $^{44}$Sc and $^{44}$Ti at the same time.