Contribution ID: **43** Type: **Oral Presentation**

Pathways of metal flows in the Milky Way as traced by 26Al

We studied the distribution and kinematics of metal flows
in the Milky Way with INTEGRAL observations of the 1.8 MeV
radioactive decay line of 26Al and hydrodynamic simulations.
The gamma rays pinpoint the flows of freshly produced metals
from massive stars about 1 Myr (decay time) after ejection.
We find in concordance from simulations
and observations that 26Al is mostly ejected into big bubbles
and superbubbles that connect to the Galactic halo.
A significant fraction of 26Al is in the hot gas phase.
Mixing between hot and cold gas can be observed in the
nearby ScoCen superbubble, which has a clear 26Al detection.
Overall, a picture emerges where the complex Galactic
ecosystem channels fresh metals along various pathways
from the nearest star-forming cloud out to the
Galaxy halo.

Length of presentation requested

Oral presentation: 17 min + 3 min questions

Please select between one and three keywords related to your abstract

Interstellar Medium

2nd keyword (optional)

3rd keyword (optional)

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