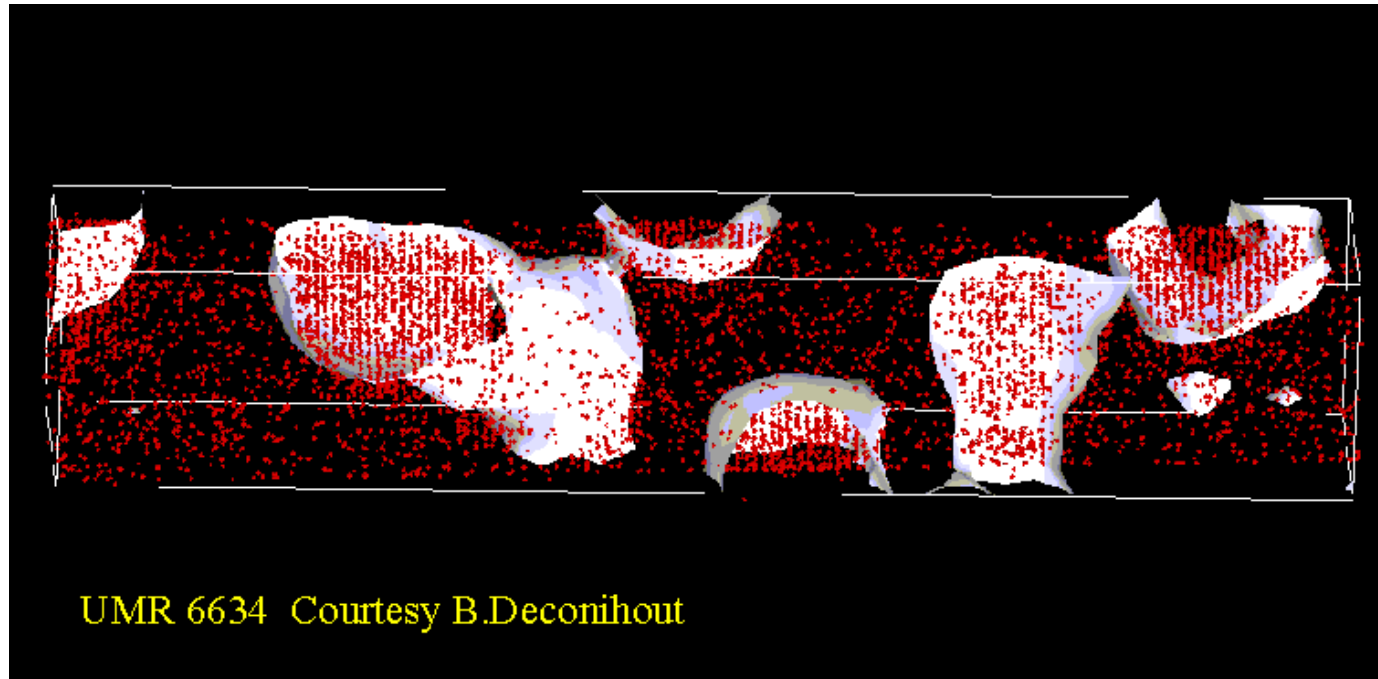


# Nickel based Superalloy

CAMECA



Three-dimensional reconstruction of a small volume ( $8 \times 8 \times 45 \text{ nm}^3$ ) of a nickel base superalloy (3.1% Al, 25.5% Cr).

This is the image related to Al. Al atoms are red dots.

This material contains small Aluminium-enriched  $\gamma'$  particules finely dispersed in a Chromium- rich  $\gamma$  solid solution. The Aluminium-rich planes alternate with Nickel enriched/Aluminium depleted planes with a periodicity equal to half the lattice parameter ( $a=0.36 \text{ nm}$ )

**Tomographic Atom Probe**