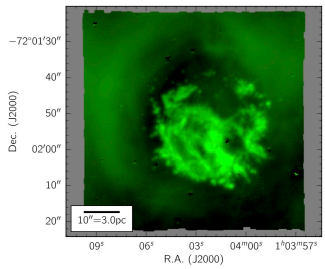
Virtual Reality:
potential for scientific uses in astrophysics ?

The Experiment:

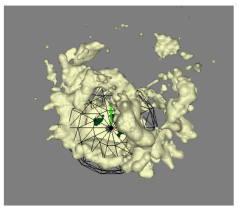
1 MUSE datacube
+
1 Master student
+
1 HTC Vive
+
3 months

3D structure of the optical ejecta in SNR 1E 0102.2-7219



Python (mayavi)

*

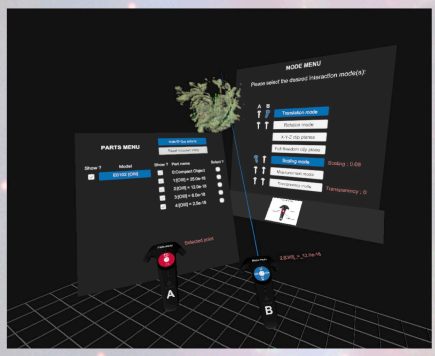


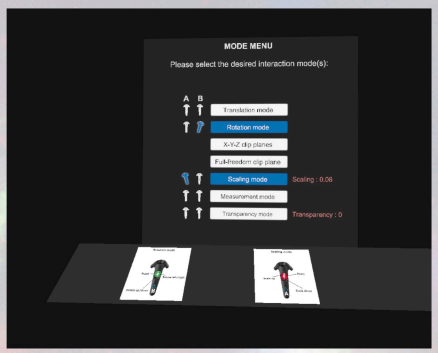
E0102-VR

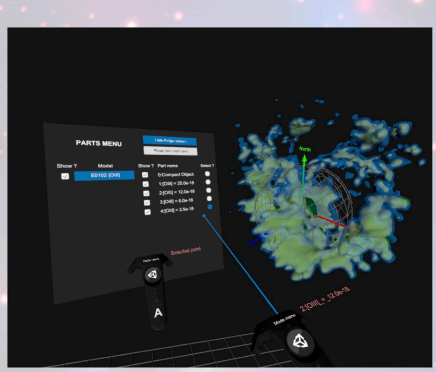
An experimental Virtual Reality application for observational astrophysics

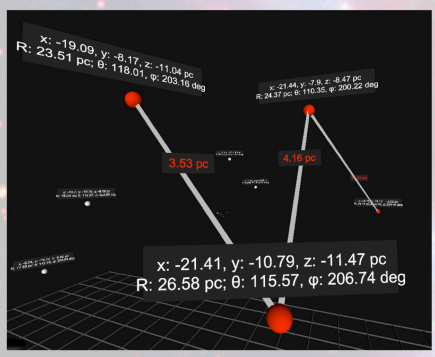
Enrico Baracaglia[(1)] & **Frédéric P.A. Vogt**[(2)]

(1) ISAE-SUPAERO, France; (2) ESO, Chile.



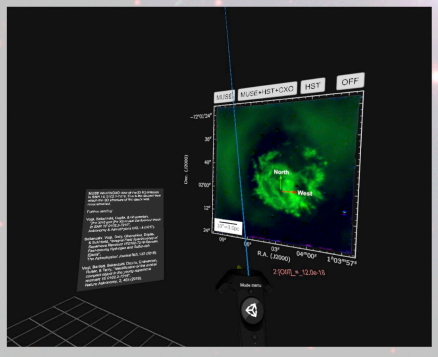


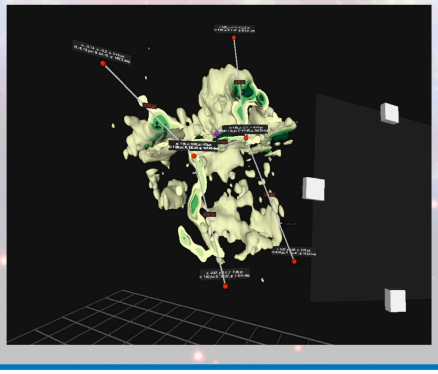




Scan me

to watch a demo video





Get the app (for free): https://fpavogt.github.io/E0102-VR

For more info: Baracaglia & Vogt, *"Characterizing the 3D structure of the optical ejecta in SNR 1E 0102.2-7219 using Virtual Reality"*, AJ, under review.

and

or

Talk to me!

* Vogt, Seitenzahl, Dopita, & Ghavamian, *"[Fe XIV] and [Fe XI] reveal the forward shock in SNR 1E 0102.2-7219"*, 2017, A&A, 602, L4.
Vogt, Seitenzahl, Dopita & Ruiter, *"Linking the X3D Pathway to integral field spectrographs: YSNR 1E 0102.2-7219 in the SMC as a case study"*, 2017, PASP, 129, 975.
Vogt, Owen, Verdes-Montenegro & Borthakur, *"Advanced Data Visualization in Astrophysics: The X3D Pathway"*, 2016, ApJ, 818, 115.