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Gaia-ESO study of the open cluster Pismis 18

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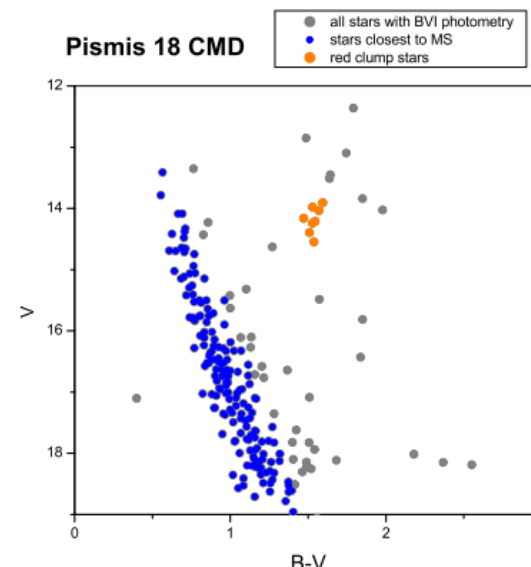
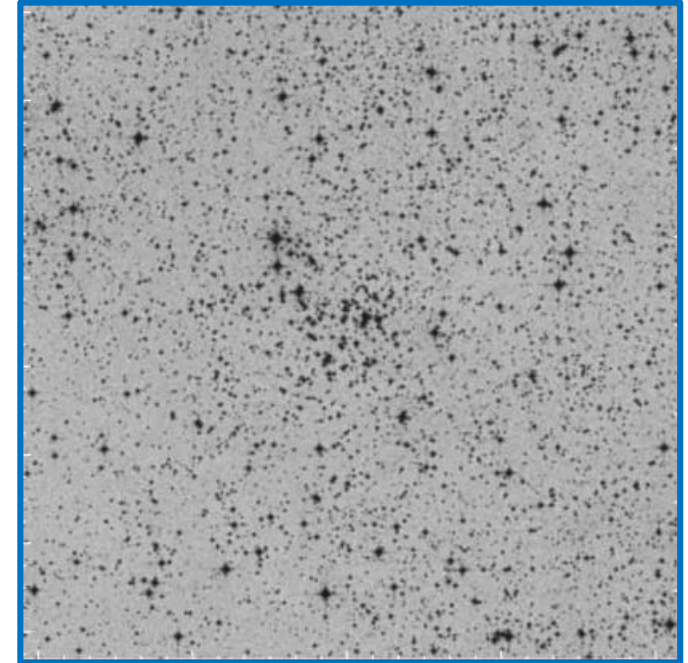


An inner disk intermediate age open cluster in the direction of the galactic center

- confirmed as an open cluster only in 1998
- useful in tracing the structure and evolution of the inner disk of our Galaxy
- GAIA-ESO Spectroscopic Survey (Gilmore et al. 2012)
- Observations VLT— GIRAFFE+ UVES spectrographs May 2014

AIMS

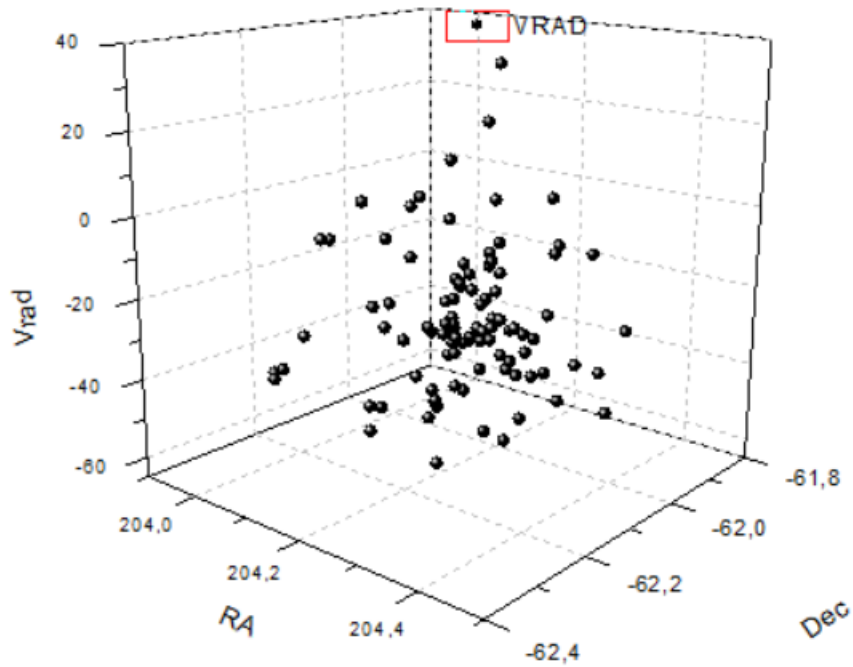
- Radial Velocities
- Metallicities/detailed element abundances
- Membership
- Update cluster parameters



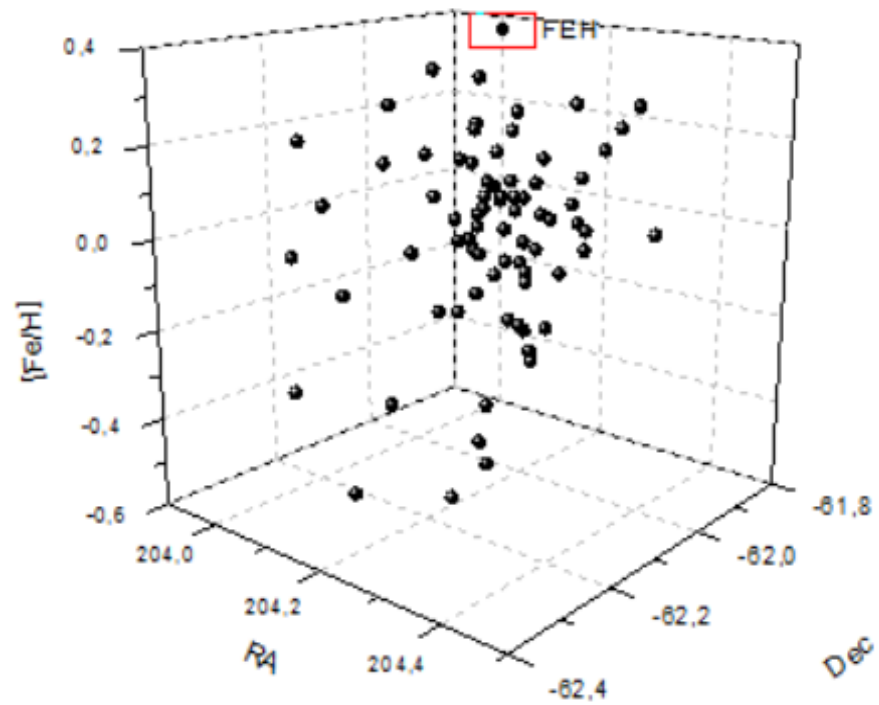
- RA, Dec = 13 36 55, -62 05 36 (J2000)
- $d_0 = 2.24 \pm 0.41$ kpc
- $R_{GC} = 7.53$ kpc
- $t = 1.2 \pm 0.4$ Gyr (Piatti et al. 1998)
- $E(B-V) = 0.50 \pm 0.05$
- Diameter=4-5.6 arcmin

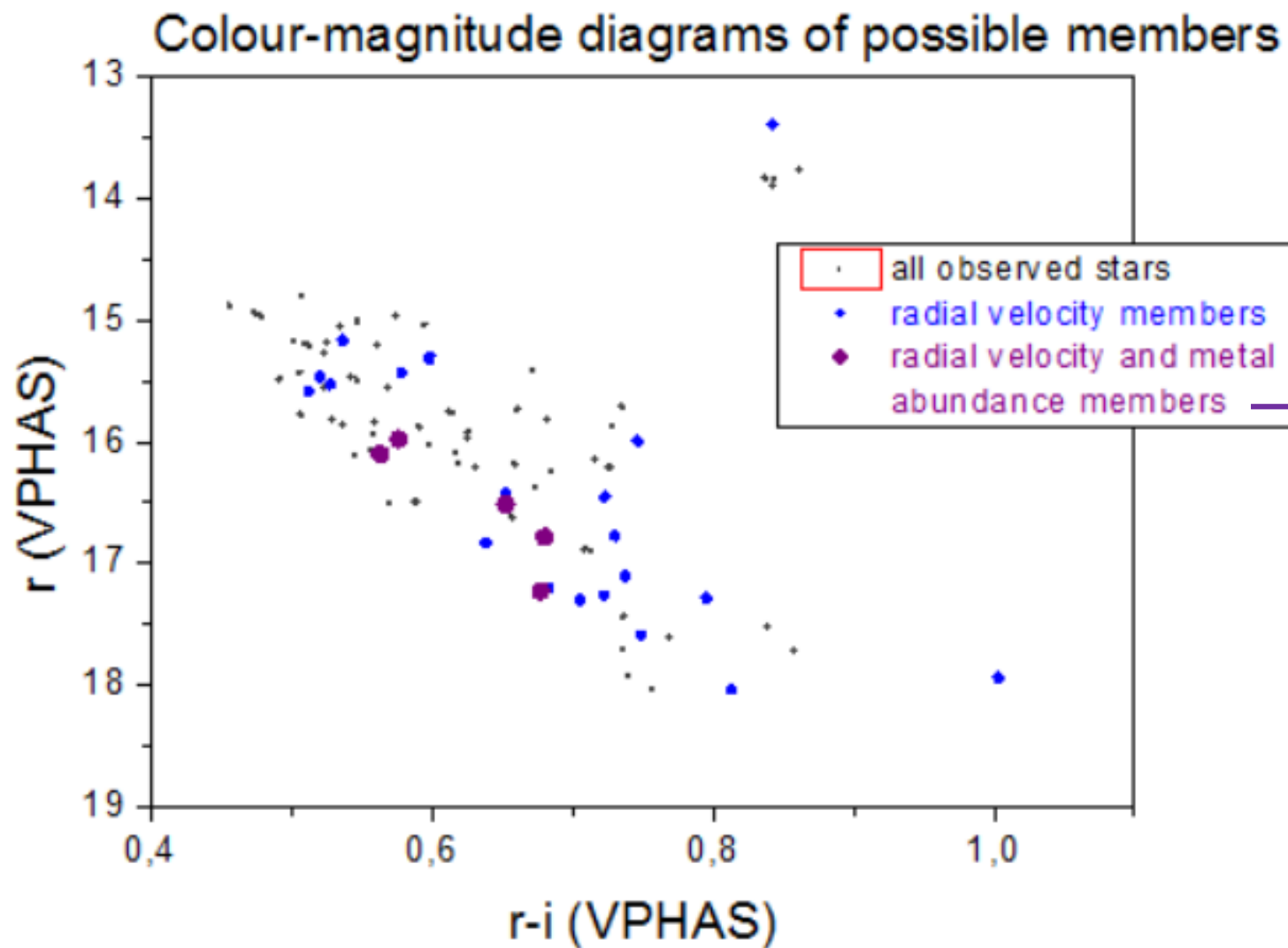
Preliminary Results

Radial velocity: $\sim -29\text{km/s}$ (median)



$[\text{Fe}/\text{H}]$: 0.043 dex (median)





Abundances (iDR4) expressed in $12+\log(\text{El}/\text{H})$

All slightly above solar

Li ~ 2.5

C ~ 8.4

Ca ~ 6.4

Ti ~ 5.2

Ni ~ 6.2

Ba ~ 2.17

Interstellar Reddening

