



### Red skies behind dust clouds

Like the atmosphere, interstellar dust scatters blue light a lot more than red light. In consequence, the average colours of Gaia are a good first approximation to where there's dust in the nearby sky. The image above shows those colours around a dust cloud in Monoceros. On its right you see the same region in WISE mid-infrared.

Can you find that reddening yourself? Try it:

**What is the average BP-RP colour** in the Gaia DR3 stars 0.25 degrees around the dense dust cloud in Monoceros at

$$\alpha, \delta = 246.71, -24.54?$$

**And what is it around the dust-poor region** in Bootes around

$$\alpha, \delta = 214.85, 33.68?$$

The



## AG 2022 Puzzler



**Win** our great 70 cm × 140 cm **towel** with a Gaia's Hertzsprung-Russell diagram on it.

There is a computer at our booth you can use to **solve** the puzzler with all recommended software installed.

At our booth, about 15 minutes into the coffee breaks on Tuesday and Wednesday, we will give a hint – every time a new one. Plus, of course, we're always there to help with VO problems of all kinds.

**Hand in** your solutions at the GAVO booth. Solutions on Tuesday get three tickets for the raffle, on Wednesday, you get two, on Thursday, one. The **winner** will be drawn at our booth during the Thursday afternoon coffee break.

We will post a **solution** on our blog at <http://blog.g-vo.org/> some time around then.

An **archive** of previous puzzlers and their solutions (which will certainly help!) is at <http://www.g-vo.org/puzzlerweb>.