

# The



# AG 2019 Puzzler

Do you know where there's the highest concentration of nebulae on the Sky? More precisely, of NGC objects? Guess for a second. Then figure it out using the VO:

**What HEALpix of level 3 holds the largest number of NGC objects?**

**What HEALPix at level 4?**

**And what are the RA and Dec of their centers?**

Bonus: You get an extra ticket in the raffle if you tell us both what constellation your points are in and what sky reference system is used in the Aitoff-projected figures on this flyer.

**Win** our great 70 cm × 140 cm **towel** with a beautiful astronomical image 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. Get a bonus ticket if you tell us what constellation your points are in. The **winner** will be drawn at our booth during the Thursday afternoon coffee break.

A PDF with a **solution** will be posted at <http://docs.g-vo.org/2019-ag-solution.pdf> some time around then. An **archive** of previous puzzlers and their solutions is at <http://www.g-vo.org/puzzlerweb>.