## WEEK 37

## SPIRAL GALAXIES

Ashish Kumar Spiral Galaxies
Grant Fikes Spiral Galaxies
Murat Can Tonta Spiral Galaxies
Jeffrey Jin Spiral Galaxies
John Bulten Spiral Galaxies (Line)
Thomas Snyder Double Spiral Galaxies

GRANDMASTER PUZZLES

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## Spiral Galaxies by Ashish Kumar

Rules: Divide the grid along the indicated lines into connected regions - "galaxies" with rotational symmetry. Each cell must belong to one galaxy, and each galaxy must have exactly one circle at its center of rotational symmetry.


Triplets

## Spiral Galaxies by Grant Fikes

Rules: Divide the grid along the indicated lines into connected regions - "galaxies" with rotational symmetry. Each cell must belong to one galaxy, and each galaxy must have exactly one circle at its center of rotational symmetry.


## Down the Middle

## Spiral Galaxies by Murat Can Tonta

Rules: Divide the grid along the indicated lines into connected regions - "galaxies" with rotational symmetry. Each cell must belong to one galaxy, and each galaxy must have exactly one circle at its center of rotational symmetry.


White Hole

## Spiral Galaxies by Jeffrey Jin

Rules: Divide the grid along the indicated lines into connected regions - "galaxies" with rotational symmetry. Each cell must belong to one galaxy, and each galaxy must have exactly one circle at its center of rotational symmetry.


## Spiral Galaxies (Line) by John Bulten

Rules: Standard Spiral Galaxies rules. Also, there may not be four consecutive cells that are part of a galaxy in any row or column.


## Spiral Galaxies (Double) by Thomas Snyder

Rules: Variation of Spiral Galaxies. In addition to the standard rules, some circles are shaded gray and must belong to galaxies containing two gray circles, not one, with the circles in rotationally symmetric spots for those galaxies.


Double Ring

