Massimo Gasperini

Spirals from a board

**Abstract:**

“Bowl from a board” is an old technique used by woodworkers: you cut concentric circles on a wooden board at a bevel angle, and stacking them up you get a bowl. Remarkably, if you use wedges instead of boards you get a logarithmic spiral.

![Image of logarithmic spiral](image)

I have written software to draw the outlines of the segments to be cut on the wedge. These segments are not only circles, but ellipses and more complicate curves like sine curves and fourth grade functions.

![Image of software output](image)

Changing the parameters of the curves and the angle of the wedge you obtain countless 3D surfaces. My wood sculptures are just sections of these surfaces, which can have negative or positive curvatures.

![Image of wood sculptures](image)

I use different kinds of wood: oak, cherry, linden, wengé, afrormosia.

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**Keywords:** logarithmic spiral, wood sculpture, mathematical art