Abstract: During experiments performed recently with high-school students on generation of umbilics by magnets, an incongruous encounter between a coiled hedgehog \([1,2]\) \((+2\pi \text{ defect})\) and a masked hunter (an insect) lead to a serendipitous discovery of the flow-induced reversal in the “Meyer’s magic spiral” pattern.

The talk will start by a short introduction of liquid crystals for pedestrian and an experiment on generation of umbilics by magnets [3] will be performed. Next, we will show how rotating magnetic fields wind up the texture of an umbilic. Finally, we discuss the winding reversal induced by Poiseuille flows.