Winding snakes in flowing nematic liquid crystals:
chiral structures built from achiral building blocks

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When an achiral nematic liquid crystal flows in a microfluidic channel, a snake-like structure emerges.
The structure originates from a periodic double-twist deformation of the liquid crystal; the liquid crystal exhibits twist deformations both in the flow direction ($x$) and the gap direction ($z$).
The resulting structure breaks symmetry: It is \textit{chiral} structure built by \textit{achiral} units; a rare phenomenon.