

# A new twist of materials beyond helical structures

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***Wednesday September 4  
at 2 pm in 7 WW 2.300  
Multipurpose room***

***All welcome!***

Allen et.al. theoretically proposed that light carries orbital angular momentum (OAM), associated with its helical wavefront with an on-axis phase singularity.

Going beyond these nano/micron scale helical structures based on light with OAM, we here report that light plays a role as a trigger to 'twist' even liquid-phase materials with large mass.

Such new 'twist' of materials associated with the interaction between light with orbital angular momentum and matter will further lead to entirely novel fundamental and applied materials science.

L. Allen, *et.al.*, Phys. Rev. A, **45**, 8185 (1992).



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