Linked and knotted beams of light WILLIAM IRVINE, Center for Soft
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Maxwell's equations allow for curious solutions having linked and knotted field lines.
A particularly striking solution is one characterized by the property that *all* electric
and magnetic field lines are closed loops with *any* two electric(magnetic) field lines
linked. These little known solutions, are based on the Hopf fibration and have a
remarkably simple representation in terms of self-dual Chandrasekhar-Kendall curl
eigenstates. I will discuss their structure, time evolution, physical properties and
how they may be physically realizable.

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