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Tesis:**"GENERACIÓN DE HACES ESTRUCTURADOS PARCIALMENTE COHERENTES"****Resumen:**

Through the manipulation of the intensity, polarization and phase on a light field is how we can obtain structured light. There are several techniques for structuring light in the high spatial coherent regime but only few in partially coherent even when it is the nature of light. Studies have shown that partially coherent beams have the same applications that their reciprocal scalar beams, but they are more resilient to atmospheric fluctuations. However, the generation and characterization of partially coherent beams are still lacking and even more their vector form. In this thesis we present the mathematical model, the computational generation of the Partially Coherent Vector Beam (PCVB) and two experimental setups to generate them with the aid of a Digital Micro Mirror Device (DMD). The expected theoretical results agree with our simulations and pave the way for further theoretical and experimental results, which are left as a future work.