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Atomic clocks have a remarkable precision below 10-18, making them well suited for studies of fundamental physics. For example, we can use clocks to search for ultra-light scalar dark matter by probing variations in the fine structure constant. Constraints on dark matter's coupling strength with normal matter have already been published with the use of different clocks and the field is now pushing for ever-better stabilities to improve these constraints. Despite recent advancements, state-of-the-art optical clocks still suffer the limits imposed by their sequential operation and the Dick noise that comes with it. In the Ultra-precise, Shock-resistant Optical Clock (USOC) project, we aim to build a novel Sr ultra-cold atomic system operating continuously, therefore eliminating the dead-time and oscillator noise present in conventional optical clocks. This system will be able to reach unprecedented levels of stability and will require the development of new techniques to produce a continuous high-flux source of ultra-cold atoms and a conveyor-belt lattice trap to transport them. In this poster I would like to outline the advantages of continuously-operating optical clocks, their use in the search for ultra-light dark matter and how we aim to achieve this in the USOC project.

**Session Classification:** Poster Session & Wine & Coffee