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Abstract for an Invited Paper
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**Undergraduate physics research at ILP**

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I will describe how undergraduate physics students can become involved in research work in theoretical atomic and laser physics. This is an ideal research area in which even high school students or students in their Freshman year can actively contribute by performing a wide variety of computer simulations. I will also describe how the curriculum of physics department has evolved in the last thirty years to make student research work one of its center missions. Illinois State University has a Bachelor's degree sequence in computational physics that was created to foster student-faculty collaborative research projects. Originally intended as a recruitment tool, it turned into a retention tool for our majors. I will give a few examples of research projects that involve undergraduate students in an essential way. These range from classical mechanical simulations to accompany of our studies of how matter in form of electron-positron pairs can be created from vacuum to bio-optical imaging schemes.