

**Physics 4410**  
**Quantum Mechanics 2**

**Lecture 34**

**The WKB approximation**

November 20, 2020

1. Describe the classical motion of a particle in one dimension.

2. What might the quantum wave function look like in this semiclassical regime?

3. Organize a systematic expansion of the time-independent Schrödinger equation in  $\hbar$ .

4. What is the zeroth order solution to WKB?

5. What is the first order solution to WKB?