

# **Quantum Mechanics: Homework on Postulates in Quantum Mechanics**

**Dragica Vasilcska and Gerhard Klimeck**  
**(ASU, Purdue)**

1. Derive the expression for the position operator in momentum representation.
2. Derive the expression for the momentum operator in position representation.
3. Prove the minimum uncertainty principle for Gaussian wave-packets as derived in the notes.