

Figure 1. Schematics of the UHV apparatus to study Rydberg atom-surface interactions and a picture of the working apparatus at the 5th Institute of Physics.

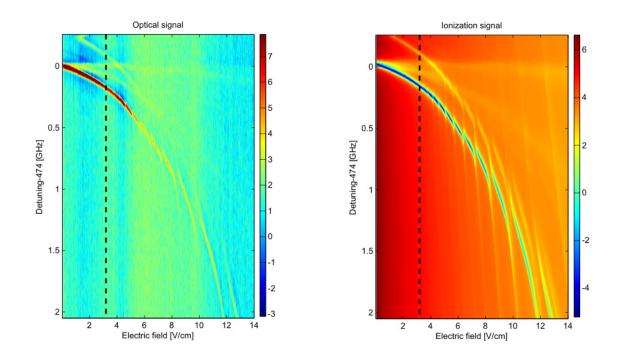


Figure 2. Stark map for the 42S Rydberg state. Signal-to-noise comparison between the optical signal (left) and the measured ionization current (right) measured simultaneously in the same vapor cell.