Nucleon-deuteron scattering in configuration space[1] VLADIMIR
SUSLOV, North Carolina Central University, Durham NC, 27707, MIKHAIL
BRAUN, Saint Petersburg State University, IGOR FILIKHIN, BRANISLAV VLA-
HOVIC, North Carolina Central University — A new computational method for
solving the configuration-space Faddeev equations for the breakup scattering prob-
lem [1] has been applied to consider the elastic pd scattering. To perform numeric
calculations for arbitrary nuclear potential and with arbitrary number of partial
waves retained, we use approach proposed in [2]. The calculations of the inelasticity
and phase-shift for various lab energies were performed with the charge independent
AV14 potential. The results are compared with those of the Pisa group [3]. 1. V.M.
Suslov and B. Vlahovic, Phys. Rev. **C69**, 044003 (2004). 2. S.P. Merkuriev, C.
Gignoux and A. Laverne, Ann. Phys. **99**, 30 (1976). 3. A.Kievsky, M. Viviani, S.
Rosati, Nucl. Phys. A**577**, 511 (1994).

Branislav Vlahovic
North Carolina Central University

Date submitted: 10 Jan 2007   Electronic form version 1.4