## On the algebraic curves for circular and folded strings in $AdS_5 \times S^5$

D. Arnaudov<sup>\*</sup>, R. C. Rashkov<sup>†,\*\*</sup> and T. Vetsov<sup>\*</sup>

\* Department of Physics, Sofia University,5 J. Bourchier Blvd, 1164 Sofia, Bulgaria

 <sup>†</sup> Institute for Theoretical Physics, Vienna University of Technology,
Wiedner Hauptstr. 8-10, 1040 Vienna, Austria

## Abstract

There have been recent advances in the construction of algebraic curves for certain classes of string solutions in the context of the AdS/CFT correspondence. In this paper we will obtain and analyse the Lax operator and associated spectral curves in the cases of circular and folded string solutions in  $AdS_5 \times S^5$ .

<sup>\*</sup>e-mail: rash@hep.itp.tuwien.ac.at