

Abstract Submitted
for the DAMOP05 Meeting of
The American Physical Society

Spectra of Stick Molecules¹ REINHOLD BLUMEL, Wesleyan University — Imagine an electron roaming freely on a ball-and-stick molecule made out of very thin wire. The result is a “quantum network,” or a “quantum graph.” It is shown that no matter how complex the stick molecule, its quantum spectrum can be computed explicitly and analytically using exact periodic-orbit expansion techniques.

¹Funded by NSF, grant number PHY-9984075

Reinhold Blumel
Wesleyan University

Date submitted: 28 Jan 2005

Electronic form version 1.4