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Extractions of Resonance Parameters with Speed-Plot and Time-Delayed methods¹ NOBUHIKO SUZUKI, TORU SATO, Osaka University, TSUNG-SHUNG LEE, Argonne National Laboratory — Within several exactly soluable multi-channel multi-resonance models, the conditions under which the Speed-Plot and Time-Delayed Methods are valid in extracting resonances from the scattering amplitudes are studied. We then apply the methods to extract the nucleon resonances from the πN amplitudes generated from a recently constructed dynamical coupled-channel model of πN scattering up to W = 2 GeV. The results comparing our findings and the values of Particle Data Group will be presented and discussed.

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