Relativisitic impulse approximation analysis of unstable nickel isotopes: 48-82Ni KAORI KAKI, Departnment of Physics, Shizuoka University — Recent relativistic mean-field calculations have provided nuclear distributions of Ni isotopes whose mass numbers are 48 through 82. We calculate observables of proton elastic scattering from these unstable isotopes and discuss relations between observables and nuclear distributions of such unstable nuclei. The calculations are based on relativistic impulse approximation (RIA) at incident proton energies: 300 and 400 MeV where predictions of RIA have been shown to provide good agreement with experimental data.

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