

wave propagation in the marginal ice zone (MIZ)

Stieltjes integral representation and bounds for
the complex viscoelasticity of the ice - ocean layer

Sampson, Murphy, Cherkaev, Golden 2021

first theory of key parameter
in wave-ice interactions only
fitted to wave data before

Analytic Continuation Method

Bergman (78) - Milton (79)
integral representation for ϵ^*
Golden and Papanicolaou (83)

Milton, Theory of Composites (02)

quasistatic, long wavelength regime

homogenized
parameter
depends on
sea ice
concentration
and ice floe
geometry

like EM waves

