

ECEn 563
Computational Electromagnetics

Homework #20
Due Apr. 8, 2024

A valid solution submitted before class on the due date with less than 10 cm scattering width over the specified range receives four points extra credit. There will be a prize for the best geometry.

1. Choose one of your modeling codes to use as a forward model for the next problem. Modify the post processing to compute backscattering width as a function of angle. (a) First, check your code for a circular cylinder. Plot the analytical bistatic scattering width on top of your simulated monostatic backscattering width and make sure the backscattering width is correct. (b) Check your code using the benchmark case on the course website.

2. 9.4 [Stealth Contest]

Hint: The minimum scattering width over the given angular range should be 5-10 cm or smaller.