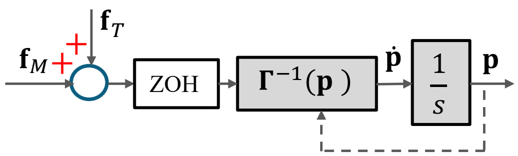
I am building a MATLAB/SIMULINK program to test motion control law with real-time estimation of the drag coefficient matrix under the wall effect. I don't know how to build the following system in SIMULINK,



where $\mathbf{\Gamma}^{-1}(\mathbf{p})$ is the inverse of the position-dependent drag coefficient matrix associated with an inclined plane.

Parameters need to be specified/calculated in the MATLAB program:

1. Two angles and one distance defined the orientation and position of the inclined plane: θ, ϕ, and p_z.
2. Calculate the plane normal: $\hat{\mathbf{w}} = \begin{bmatrix} \cos\theta \cdot \sin\phi \\ \sin\theta \cdot \sin\phi \\ \cos\phi \end{bmatrix}$
3. Calculate the outer product matrix: $\mathbf{W} = \hat{\mathbf{w}}\hat{\mathbf{w}}^T$
4. The radius of the magnetic particle: R
5. The nominal drag coefficient: $\gamma_N = 0.0425(pN\ sec/um)$
6. Define two correction functions: $c_{\parallel}(\bar{h}) =$ and $c_{\perp}(\bar{h}) =$

$$c_{\parallel}(\bar{h}) = \left(1 - \frac{9}{16}\left(\frac{1}{\bar{h}}\right)^1 + \frac{1}{8}\left(\frac{1}{\bar{h}}\right)^3 - \frac{45}{256}\left(\frac{1}{\bar{h}}\right)^4 - \frac{1}{16}\left(\frac{1}{\bar{h}}\right)^5\right)^{-1}$$

$$c_{\perp}(\bar{h}) = \left(1 - \frac{9}{8}\left(\frac{1}{\bar{h}}\right)^1 + \frac{1}{2}\left(\frac{1}{\bar{h}}\right)^3 - \frac{57}{100}\left(\frac{1}{\bar{h}}\right)^4 + \frac{1}{5}\left(\frac{1}{\bar{h}}\right)^5 + \frac{7}{200}\left(\frac{1}{\bar{h}}\right)^{11} - \frac{1}{25}\left(\frac{1}{\bar{h}}\right)^{12}\right)^{-1}$$

7.

Variables need to be calculated in SIMULINK:

1. The distance of the particle from the plane: $h = \mathbf{p}^T\hat{\mathbf{w}} - p_z$
2. Normalized distance: $\bar{h} = \frac{h}{R}$
3. Calculate the inverse of the position-dependent drag coefficient matrix:

$$\mathbf{\Gamma}^{-1}(\mathbf{p}) = \frac{1}{\gamma_N c_{\parallel}(\bar{h})}\left\{\mathbf{I} - \left[\frac{c_{\perp}(\bar{h}) - c_{\parallel}(\bar{h})}{c_{\perp}(\bar{h})}\right]\mathbf{W}\right\}$$

4.