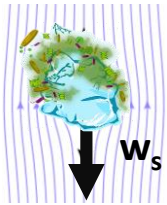




Context and motivation

Settling velocity w_s : key dynamical parameter for the transport of MPs



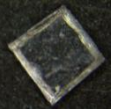

Research questions:



- Effect of **particles properties** on settling velocity?
- Influence of **biofilm** on settling velocity?



Methods

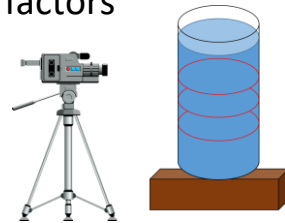
Pristine Biofouled

Sheets  

Fibers  

x 9 sizes (1-5mm)
x 3 replicas

- Density, size, shape factors
- Settling velocity:



- Observations vs theoretical formulations:

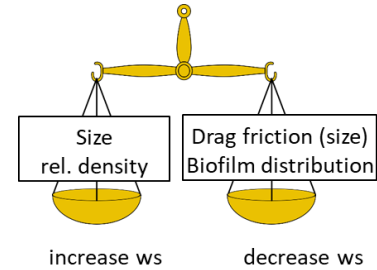
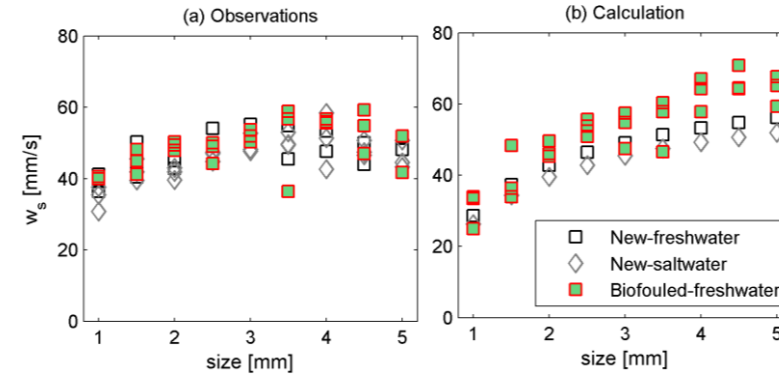
RMSE
EA

- Dietrich (1982)
- Zhiyao (2008)
- Khatmullina & Isachenko (2017)
- Diogualdi (2018)
- Waldschläger & Schüttrumpf (2019)



Results and main conclusions

Sheets: best formulation Diogualdi et al. (2018)



Fibers: best formulation Waldschläger & Schüttrumpf (2019)

