

# FIRST SYSTEMATIC ATTEMPT TO QUANTIFY FEEDBACK OF THE SGS MODELING ON HIGH ORDER VELOCITY INERTIAL RANGE MOMENTS

1) SMAGORINSKY-LES RECOVERS INERTIAL RANGE SCALING WITH A (SMALL)  
IMPROVEMENT IN THE SCALING EXTENSION

2) NEXT: CAN WE PUSH THE LES-MODEL FURTHER AND SET-UP AN IDEAL HIGHLY RESOLVED LES  
TO ENHANCE ONLY INERTIAL RANGE SCALING (IN PROGRESS)

[arXiv:1706.03219](https://arxiv.org/abs/1706.03219) [in press JoT] Effect of filter type on the statistics of energy transfer between resolved and subfilter scales from a-priori analysis of direct numerical simulations of isotropic turbulence M. Buzzicotti, M. Linkmann, H. Aluie, L. B., J. Brasseur, C. Meneveau

M. Buzzicotti, M. Linkmann, L. B., Multiscale correlations in Large Eddy Simulations: I. Scaling of correlations between resolved-scale velocity-field increments and subgrid-scale quantities [in preparation]

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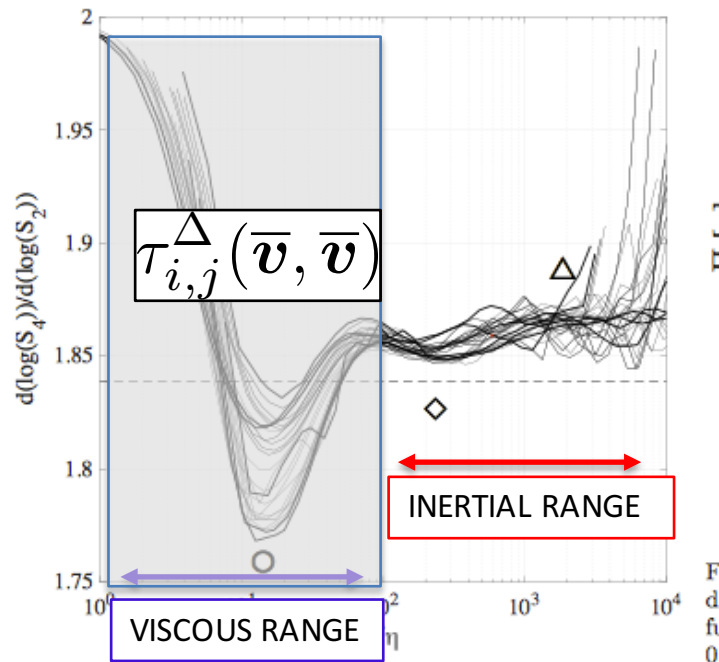
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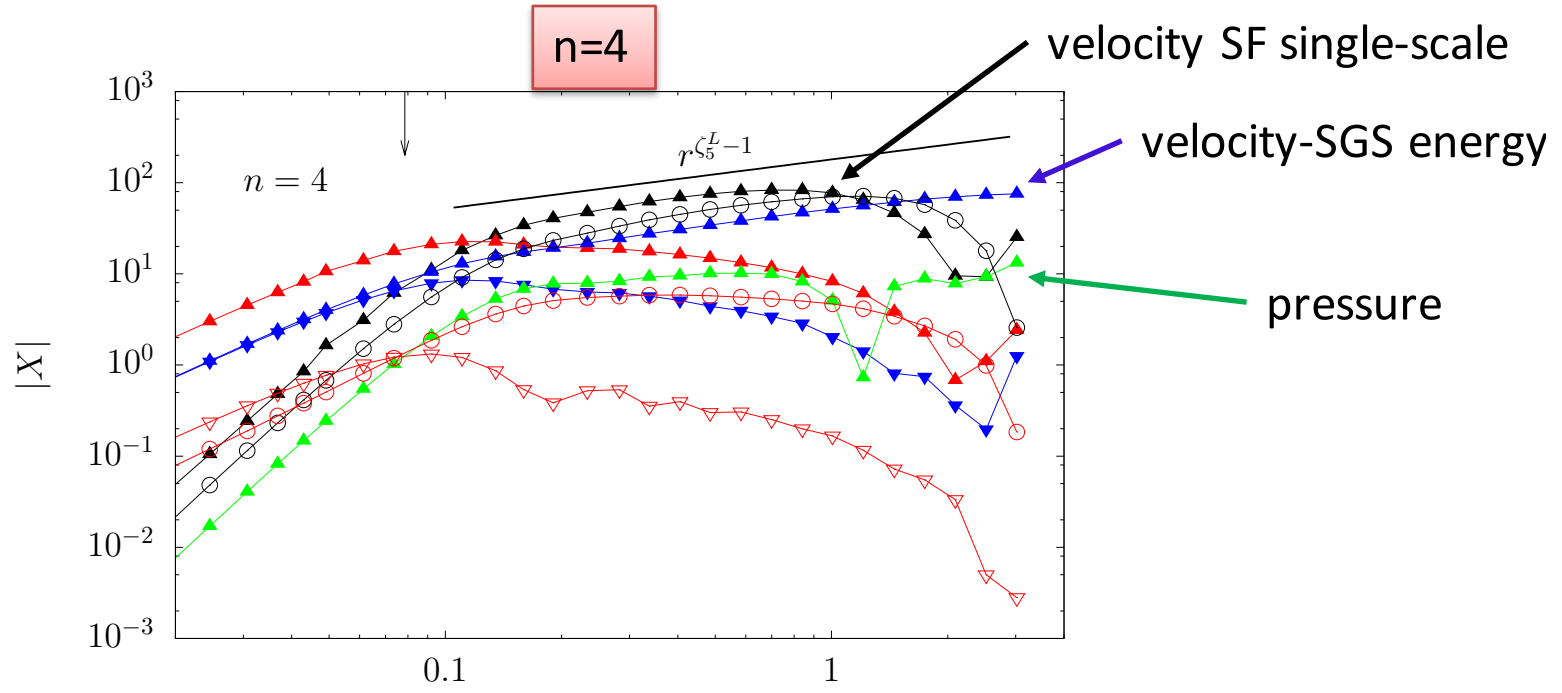
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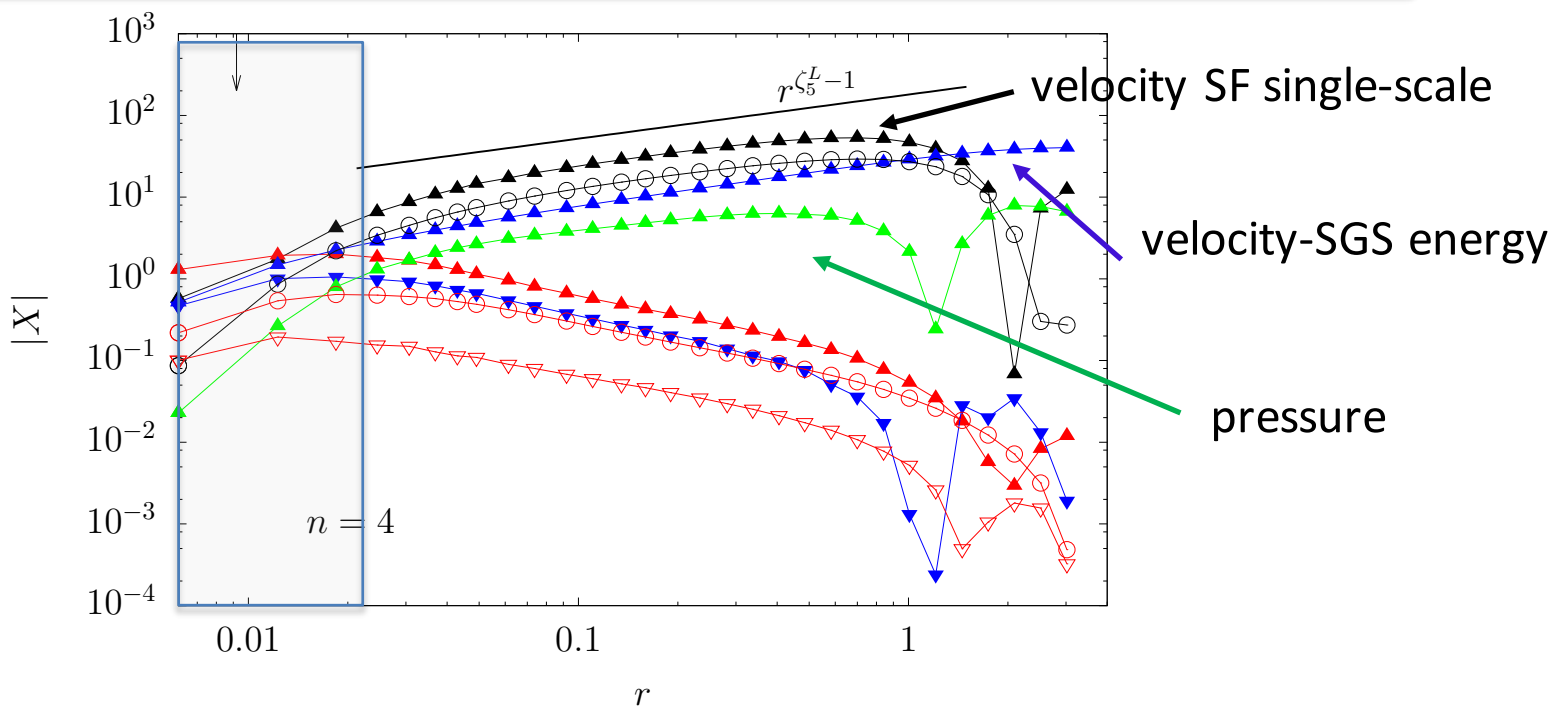


$$S^p(r) = \langle (\delta_r v)^p \rangle \sim r^{\zeta(p)}$$

APRIORI-DNS



APOSTERIORI-LES



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