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**Modeling near-wall turbulence behavior for variable-resolution bridging methods** DASIA REYES, SHARATH GIRIMAJI, Texas A&M University — High-fidelity near-wall modeling is crucial for the success of all variable-resolution turbulence modeling approaches. In this work, we revisit the log-law analysis in the context of Partially Averaged Navier-Stokes (PANS) bridging method. In the PANS method, the cut-off resolution is parameterized in terms of ratios of unresolved-to-resolved kinetic energy and dissipation. The behavior of the unresolved stresses (second-order central moments) and dissipation, as well as the resolved fields subject to different cut-off lengthscales are examined. The modeling of the related turbulent transport term is also considered. Although this work is performed in the PANS context, its findings can benefit closure modeling for all hybrid methods.

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