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Genady Ya. Grabarnik* (grabarng@stjohns.edu), 126 brambach rd, scarsdale, NY 10583, and **Ben-Zion Rubshtein**, Math Department, Ben Gurion University, Beer Sheva, Israel. *Refinement of the Yosida-Hewitt decomposition of singular functionals on operator rearrangement invariant spaces.*

Let M be a von Neumann algebra with faithful semifinite normal trace τ . Rearrangement invariant Banach subspaces of measurable operators affiliated with M, τ were introduced by Grothendieck and later by Yeadon. Recently the Yosida-Hewitt decomposition of singular functionals on operator RI spaces was considered by Dodds and Pagter. We refine the Yosida-Hewitt-Takesaki decomposition of singular functionals on operator RI spaces, show existence and spacial character of the decomposition. (Received September 20, 2013)