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Title: A note on the diagonal mapping in spaces of analytic functions in the unit polydisc

Author(s): Miroljub Jevtić, Miroslav Pavlović and Romi F. Shamoyan

We define two spaces $K^{p,q,\alpha,\beta}$ and $M^{p,\alpha}$ of analytic functions in the unit polydisc U^n of C^n, closely related to the mixed norm and the Bergman spaces on U^n, and for any holomorphic function F in $K^{p,q,\alpha,\beta}$ or in $M^{p,\alpha}$ we consider its restriction to the diagonal, i.e., the function in the unit disc U of C defined by $DF(z) = F(z, \dots, z)$, and prove that the diagonal mapping D maps $K^{p,q,\alpha,\beta}$ onto the mixed-norm space $H^{p,q,\beta+\frac{q}{p}(|\alpha|+2n-1)}(U)$ and the space $M^{p,\alpha}$ onto the Bergman space $A^{p,|\alpha|+2n-1}(U)$.

Address:
Miroljub Jevtić
Matematički Fakultet
PP. 550, 11000 Belgrade
Serbia

Address:
Miroslav Pavlović
Matematički Fakultet
PP. 550, 11000 Belgrade
Serbia

Address:
Romi F. Shamoyan
Bryansk State University
Bryansk, 241050
Russia