# Interpolating sequences in weighted Bergman spaces

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Let $W : \mathbb{D} \to [0, \infty)$ be a measurable function and $0 < p < \infty$. $A^p(W)$ is the space of all analytic functions $f$ in $\mathbb{D}$ such that

$$\|f\|_{p,W}^p = \int_{\mathbb{D}} |f(z)|^p W(z) dA(z) < \infty.$$

A sequence $(z_n) \subset \mathbb{D}$ is said to be an interpolating sequence for $A^p(W)$ if for any $(a_n) \in \ell^p$ there exists $f \in A^p(W)$ such that

$$f(z_n)(1 - |z_n|^2)^{-2/p}(\inf_{w \in D(z_n,r)} W(w))^{-1/p} = a_n, \quad n \in \mathbb{N}(0 < p \leq 1)$$

and

$$f(z_n)(1 - |z_n|^2)^{2/p}(\frac{1}{|D(z_n, r)|} \int_{D(z_n,r)} W^{-p'/p})^{-1/p'} = a_n, \quad n \in \mathbb{N}(1 < p < \infty),$$

where $D(z, r)$ denotes the hyperbolic disk.

Aleman and Vukotic proved [1]) that any uniformly separated sequence is interpolating for $A^p(W)$ in the case of radial weights which are normal. We extend this result to non radial weights under certain $A_1$-condition for the averaging operator, extending the previously mentioned result.

Keywords. Interpolating sequences, weighted Bergman spaces, $A_1$-condition

## References

[1] Aleman, A, Vukotic, D. *On Blaschke products with derivatives in Bergman spaces with normal weights*, J.Math. Anal. Appl., **361** (2010), 492–505.

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