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**Calderón-Zygmund operators in new function spaces 'near  $L^1$ '**

The following topics are intended to discuss:

- subsets of variable exponent Lebesgue spaces  $L^{p(x)}$ ,  $\inf p(x) = 1$ , invariant with respect to the Calderón-Zygmund operators;
- application to the BVPs for analytic and harmonic functions in the domain with Carleson boundary;
- application to the approximation theory; to establish condition ensuring belongness of conjugate functions (or its derivative) to  $L^{p(x)}$ ,  $\inf p(x) = 1$ ; to estimate its best approximation by trigonometric polynomials.