

**SUMMABILITY OF DOUBLE FOURIER SERIES
BY ROGOSINSKI-TYPE MEANS**

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Abstract. Regularity conditions for Rogosinski-type (Bernstein-Rogosinski-type) means of double Fourier series of continuous functions are obtained. These means were first introduced in the most general form by R.M. Trigub. Such means depend on some numerical parameters, an appropriate borelian measure and its support and a shape of a domain generating partial sums of Fourier series. We investigate the case when the partial sums are generated by polygons (a rectangle, a rhombus, symmetric with respect to an origin) and the measure is uniformly distributed over the areas of correspondent polygons.

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