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Gilbert G. Walter* (ggw@uwm.edu), Dept. of Mathematical Sciences, PO Box 413, UWM,
Milwaukee, WI 53211, and **Tatiana Soleski**. *Chromatic Series for Functions of Slow Growth*.

The theory of chromatic derivatives leads to chromatic series which replace Taylor's series for bandlimited functions. For such functions, these series have a global convergence property not shared by Taylor's series. In this work the theory is extended to bandlimited functions of slow growth. This includes many signals of practical importance such as polynomials, periodic functions, and almost periodic functions. This extension also enable us to get improved local representation and convergence results for chromatic series. (Received August 19, 2009)