

PART 1:

Journal Name:	British Journal of Mathematics & Computer Science
Manuscript Number:	2013_BJMCS_5086
Title of the Manuscript:	The Fourier multipliers of p-Fourier spaces on compact groups
Type of the Article	Research Paper

In this paper the authors extend the results of M. Lind in [L] for functions of bounded variation but are not consequence of it. M. Lind studied the scale of spaces $V_{p,\alpha}$ between the class V_p of functions of bounded p -variation and the Sobolev space W_p . The authors proved sharp estimates of $v_{p,\alpha}$ via Besov type-norms defined in terms of fractional continuity modulus of order $1 - 1/p$ and limiting relations for these norms.

On the other hand, motivated by the result of F. Riesz in [M], it is introduced for $p > 1$, the class $V_{p,1/p'}$ of functions of bounded $(p, 1/p')$ second variation as the class of those functions for which $v_{p,1/p'}^{(2)}$ is finite. From here one can see that

$$v_{p,1/p'}(\mathcal{F}') = v_{p,1/p'}^{(2)}(\mathcal{F}).$$

The authors motivate this work by the results of M. Lin [L], N. Merentes [M] and A. P. Terehin [T].

This is an interesting paper, mostly very well written and organized, the English and the writing is enjoyable and the results are mathematically correct. However it is observed some minor typos that are described below:

P.1 1¹² Replace $\{x_0, \dots, x_n\}$ by $\{x_0, \dots, x_n\}$.

P.1 1¹³ Replace $< \dots <$ by $< \dots <$.

P.2 2¹³ Replace $x_2 < \dots < y_n$ by $x_2 < \dots < y_n$.

P.4 4₂ Replace $x_2 < \dots < x_{N-1}$ by $x_2 < \dots < x_{N-1}$.

P.5 5¹¹ Drop the symbol δ .

P.5 5⁵⁻⁷ The inequalities (i), (ii) and (iii) must be aligned.

P.8 8⁴ Replace $\frac{\omega_{2-1/p}(\underline{f})}{\delta^{2-1/p}}$ by $\frac{\omega_{2-1/p}(\underline{f})}{\delta^{2-1/p}}$.

P.10 10¹ Replace $x_1 \dots < x_{n-1}$ by $x_1 < \dots < x_{n-1}$.

P.10 10⁹ Replace $x_1 \dots < x_{n-1}$ by $x_1 < \dots < x_{n-1}$.

P.12 10⁹ Replace $x_1, \dots, x_{n-1}$ by $x_1 < \dots < x_{n-1}$.

I believe that this work meets all the conditions required by this journal to be accepted for publications, so this paper should be published in this journal at the earliest possible.

Note: Anonymous Reviewer