Alexander (Oleksandr) V Tovstolis* (oleksandr.tovstolis@ucf.edu), Department of Mathematics, 4393 Andromeda Loop N, Orlando, FL 32816, and Xin Li (xin.li@ucf.edu), Department of Mathematics, 4393 Andromeda Loop N, Orlando, FL 32816. On Bernstein and Nikolskii Type Inequalities, and Poisson Summation Formula in Hardy Spaces.

We consider Hardy spaces $H^p(T_\Gamma)$ in tube domains over open cones $(T_\Gamma \subset \mathbb{C}^n)$. Bernstein and Nikolskiĭ type inequalities for entire functions of exponential type K belonging to $H^p(T_\Gamma)$ are obtained. The sharpness of the constants in these inequalities is still an open question.

Another result for Hardy spaces $H^p(T_{\Gamma})$ with $p \in (0,1]$ is the Poisson summation formula:

$$\sum_{m \in \Lambda} f(z+m) = \sum_{m \in \Lambda} \widehat{f}(m) e^{2\pi i (z,m)}, \quad \forall z \in T_{\Gamma}.$$

The formula holds without any additional assumptions. (Received December 22, 2015)