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### **Complex interpolation of variable Triebel-Lizorkin spaces**

Function spaces play an important role in harmonic analysis, in the theory of differential equations and in almost every other field of applied mathematics. In recent years, there has been growing interest in generalizing classical spaces such as Lebesgue, Sobolev spaces, Besov spaces, Triebel-Lizorkin spaces to the case with either variable integrability or variable smoothness. In this talk, we present complex interpolation of variable Triebel-Lizorkin spaces, especially we present the complex interpolation of  $F_{p(\cdot),q}^\alpha$  and  $F_{p(\cdot),p(\cdot)}^{\alpha(\cdot)}$  spaces. Also, some limiting cases are given.