1108-28-271   **Song-Gyong Ri**, Department of Applied Mathematics, Kim Chaek University of Technology, Pyongyang, North Korea, **Huo-Jun Ruan*** (`ruanhj@zju.edu.cn`), Department of Mathematics, Zhejiang University, Hangzhou, 310027, Peoples Rep of China, and **Qiang Xu** (`xuqiangwang@jsnu.edu.cn`), School of Mathematics and Statistics, Jiangsu Normal University, Xuzhou, 221116, Peoples Rep of China. *Fractal interpolation functions on rectangular grids and p.c.f. fractals.*

We will mainly talk about our recent results on fractal interpolation functions (FIFs), including: 1) Present a general method to construct FIFs on rectangular grids, and also introduce bilinear fractal interpolation surfaces which can be defined without any restriction on interpolation points and vertical scaling factors; 2) Construct FIFs on p.c.f. fractals, and discuss the energy, normal derivative and Laplacian of these functions. (Received January 16, 2015)