

As Nicolas Addington pointed out to us, the example in Section 5.4.2 of the published version of “Lines on cubic hypersurfaces over finite fields” is wrong. The equation should be

$$x_1^3 + x_2^3 + x_3^3 + x_1^2x_2 + x_2^2x_3 + x_2x_4x_5 + x_3^2x_1 + x_1x_2x_3 + x_1x_4^2 + x_1^2x_4 + x_2x_5^2 + x_2^2x_5 \\ + x_4^2x_5 + x_4x_5^2 + x_3x_6^2 + x_3^2x_6 + x_4^2x_6 + x_4x_6^2 + x_5^2x_6 + x_5x_6^2 + x_4x_5x_6 = 0$$

It defines a smooth cubic fourfold $X \subset \mathbf{P}_{\mathbf{F}_2}^5$, the only \mathbf{F}_2 -line contained in X is the line $\langle(0, 0, 0, 0, 1, 1), (0, 0, 0, 1, 0, 1)\rangle$, and X contains 13 \mathbf{F}_2 -points.

The arxiv version (which is a slightly expanded version of the published text) was corrected.