The correct statement at the beginning of §3 should have been that space  $\mathcal{P}_{sm}^{\mathbb{R}}/\{\pm 1\}$  has 4 connected components. The space  $\mathcal{P}_{sm}^{\mathbb{R}}$  actually has 5 connected components. More precisely, in the decomposition displayed in the first paragraph of §3, the spaces  $\mathcal{P}_i^{\mathbb{R}}$  are connected for i = 0, 1, 2 while  $\mathcal{P}_3^{\mathbb{R}}$  has two connected components, interchanged by negation. This does not affect the rest of the paper, in particular the classification of conjugacy classes of anti-involutions, since the map  $(x, y, z) \to (x, y, -z)$  induces an isomorphism between  $X_f$  and  $X_{-f}$ .