Bill,

A brief comment on yesterday's note.

(i) For C_2 there are *eight* one-dimensional characters.

(ii) Three of them correspond to square-integrable representations. Thus are two besides the Steinberg. These other two are conjugate with respect to a rational element in the adjoint group. Thus, they must be regarded as L-indistinguishable. They both correspond to the pair (t', X) of (iii, b). As far as I can tell from Borel's letter they lie in the principal series corresponding to this $\widehat{t}$ which itself is conjugate to

$$\begin{pmatrix} iq^{1/2} & & & \\ & -iq^{1/2} & & \\ & & -iq^{-1/2} & \\ & & & iq^{-1/2} \end{pmatrix}$$

This agrees with suggestion (iii) of my original letter.

Bob

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