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**Defining Amalgams of Compact Lie Groups**

For  $n \geq 2$  let  $\Delta$  be a Dynkin diagram of rank  $n$  and let  $I = \{1, \dots, n\}$  be the set of labels of  $\Delta$ . A group  $G$  admits a *weak Phan system of type  $\Delta$  over  $\mathbb{C}$*  if  $G$  is generated by subgroups  $U_i$ ,  $i \in I$ , which are central quotients of simply connected compact semisimple Lie groups of rank one, and contains subgroups  $U_{i,j} = \langle U_i, U_j \rangle$ ,  $i \neq j \in I$ , which are central quotients of simply connected compact semisimple Lie groups of rank two such that  $U_i$  and  $U_j$  are rank one subgroups of  $U_{i,j}$  corresponding to a choice of a maximal torus and a fundamental system of roots for  $U_{i,j}$ . It is shown in this article that  $G$  then is a central quotient of the simply connected compact semisimple Lie group whose complexification is the simply connected complex semisimple Lie group of type  $\Delta$ .

**Keywords:** Compact Lie groups, Tits buildings, Phan-type theorems, amalgam method.

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