

for  $p \in I(\mathfrak{g}_e)$  (see [5, pp. 225–226]). Moreover it can be shown that  $\tau$  satisfies condition (2) of Lemma 6 up to a nonzero constant factor.

Theorem 2 is obtained by lifting the result of Lemma 6 to the group.

#### REFERENCES

1. A. Borel and Harish-Chandra, *Arithmetic subgroups of algebraic groups*, Bull. Amer. Math. Soc. **67** (1961), 579–583.
2. ———, *Arithmetic subgroups of algebraic groups*, Ann. of Math. (2) **75** (1962), 485–535.
3. Harish-Chandra, *On the characters of a semisimple Lie group*, Bull. Amer. Math. Soc. **61** (1955), 389–396.
4. ———, *Differential operators on a semisimple Lie algebra*, Amer. J. Math. **79** (1957), 87–120.
5. ———, *Fourier transforms on a semisimple Lie algebra. I*, Amer. J. Math. **79** (1957), 193–257.
6. B. Kostant, *The principal three-dimensional subgroup and the Betti numbers of a complex simple Lie group*, Amer. J. Math. **81** (1959), 973–1032.

COLUMBIA UNIVERSITY

### CORRECTION TO ABSTRACT CLASS FORMATIONS<sup>1</sup>

BY K. GRANT AND G. WHAPLES

Professor Yukiyoji Kawada has kindly pointed out to us that our construction for an abstract class formation  $\{E(K)\}$  is wrong. Namely, we defined  $E(K)$  to be a direct limit of a family of groups  $\{M(K, N)\}$  under a mapping system  $\{\eta_{N',N}^K\}$ . These maps  $\eta_{N',N}^K$  induce on the second cohomology groups homomorphism whose kernel is not in general 0; hence it is in general not true that  $H^2(F, E(k)) = Z(\#F)Z$ . For details, see Theorem 2 of a paper by Kawada, forthcoming in Boletim da Sociedade de Matemática de São Paulo.

Our main theorem that a class formation does exist for every  $G_\infty$ , is however true: this is proved by Kawada in the paper just mentioned, using the same family of groups  $M(K, N)$  but taking an inverse limit.

After seeing Kawada's work, one of us has found a correct construction using a direct limit and replacing the  $\{\eta_{N',N}^K\}$  by a different system of maps. This will be explained in a paper to be published elsewhere.

---

Received by the editors September 11, 1962.

<sup>1</sup> Bull. Amer. Math. Soc. **67** (1961), 393–395.