

## CORRECTION TO “CONGRUENCES BETWEEN CUSP FORMS: THE $(p, p)$ CASE”

CHANDRASHEKHAR KHARE

The anonymous referee of our preprint [K2] has pointed out that there is a mistake in the proof of Theorem 2 of our paper [K1]. Namely, in the formula for the matrix  $R$  in the proof, we transpose the operators  $T_p$  and  $T_p^*$ . The error arises from the fact that it is  $(\alpha_1)_* \alpha_p^*$  which induces the usual Hecke operator on the space of cusp forms.

Fortunately, this does not affect materially the proof of Theorem 2 in [K], as  $T_p$  and  $T_p^*$  appear “symmetrically” in the matrix  $R$ , and the proof can be easily corrected (for instance, instead of considering  $(V, 0)$ , we have to consider  $(0, V)$  in the proof). Thus it was rightly said there that we were confused about this point, and the misconception is ours rather than that of the paper [MR]. (It has been pointed out by the referee of [K2] that the formula  $B \cdot \alpha_1^* = p \cdot \alpha_p^*$  which appears in the proof of Theorem 2 in [K1], does not contradict the formula in [MR], but is equivalent to it.)

### REFERENCES

- [K1] C. KHARE, *Congruences between cusp forms: The  $(p, p)$  case*, Duke Math. J. **80** (1995), 631–667.
- [K2] ———, *A local analysis of congruences in the  $(p, p)$  case*, preprint.
- [MR] B. MAZUR AND K. RIBET, *Two-dimensional representations in the arithmetic of modular curves*, Astérisque **196–197** (1991), 215–255.

SCHOOL OF MATHEMATICS, TATA INSTITUTE OF FUNDAMENTAL RESEARCH, HOMI BHABHA ROAD, BOMBAY 400005, INDIA; shekhar@math.tifr.res.in

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