

*Abstract*

## An Equational Relation for Ambient Calculus

TORU KATO<sup>†</sup>

Ambient calculus is a process algebra developed for describing mobile processes. Ambients represent the substance of movement and the field of the ambients themselves. Having this hierarchy, it can model various kinds of mobile computation. Equational properties for ambient calculus were proposed regarding the names of ambients observed from environments. That equivalence relation, however, identifies the processes which have different properties.

This paper proposes an equational relation for ambient calculus by which we can distinguish processes that the existing equivalence identifies.

(Presented January 19, 2000)

---

<sup>†</sup> Research Fellow of the Japan Society for the Promotion of Science  
Presently with Faculty of Science and Engineering,  
Kinki University