

## **Logic Systems for Game Theoretical Investigations**

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### **Abstract**

In [KN 96] and [KN 97], Mamoru Kaneko and the present author proposed two formulations of a multiepistemic logic  $GL_{\omega}$ . One is the Russell-Hilbert style calculus and the other is the Gentzen style sequent calculus. In [KN 96] and [KN 97], some results are stated without detailed proofs. In this article, some of those results will be proved in details.

### **References**

- [KN 96] Mamoru KANEKO Takashi NAGASHIMA : Game logic and its applications I. *Studia Logica*, vol. 57 (1996), pp. 325-354.
- [KN 97] Mamoru KANEKO and Takashi NAGASHIMA : Game logic and its applications II. *Studia Logica*, vol. 58 (1997), pp. 273-303.