Concurrent Programming in Lygon

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Abstract. Lygon is a logic programming language based on Girard's linear logic. From the programmer's perspective Lygon can be viewed as an extension of Prolog with linear logic connectives. In previous publications [1], [2], [3] we have shown how the linear logic aspects of Lygon allow solutions for a range of programming tasks whose solution using Prolog is contorted or requires the introduction of impure constructs. In this talk we focus on *concurrent programming* and show how the linear logic connective \Im (pronounced "par") can be used to write concurrent programs in Lygon.

Keywords: Linear logic, logic programming, concurrency, Lygon

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