

# A Graphical Representation of the Solos Calculus

## CM30082 Literature Review

Adam Lassiter

October 2017

## Contents

<b>1</b>	<b>Literature</b>	<b>2</b>
1.1	$\lambda$ -calculus . . . . .	2
1.1.1	Background . . . . .	2
1.1.2	Definitions . . . . .	2
1.1.3	Examples . . . . .	2
1.1.4	Evaluation . . . . .	2
1.2	Calculus of Communicating Systems (CCS) . . . . .	2
1.2.1	Background . . . . .	2
1.2.2	Definitions . . . . .	2
1.2.3	Evaluation . . . . .	2
1.3	$\pi$ -calculus . . . . .	2
1.3.1	Background . . . . .	2
1.3.2	Definitions . . . . .	2
1.3.3	Examples . . . . .	2
1.3.4	Evaluation . . . . .	2
1.4	Fusion Calculus . . . . .	2
1.4.1	Background . . . . .	2
1.4.2	Definitions . . . . .	2
1.4.3	Examples . . . . .	2
1.4.4	Evaluation . . . . .	2
1.5	Solos Calculus . . . . .	2
1.5.1	Background . . . . .	2
1.5.2	Definitions . . . . .	2
1.5.3	Examples . . . . .	2
1.5.4	Solos Diagrams . . . . .	2
<b>2</b>	<b>Technology</b>	<b>3</b>
2.1	Calculus Reduction . . . . .	3
2.2	Diagram Visualisation . . . . .	3
<b>3</b>	<b>References</b>	<b>3</b>

# **1 Literature**

## **1.1 $\lambda$ -calculus**

### **1.1.1 Background**

Machado (2013)

### **1.1.2 Definitions**

### **1.1.3 Examples**

### **1.1.4 Evaluation**

## **1.2 Calculus of Communicating Systems (CCS)**

### **1.2.1 Background**

Xu (2009)

### **1.2.2 Definitions**

### **1.2.3 Evaluation**

## **1.3 $\pi$ -calculus**

### **1.3.1 Background**

Parrow (2001)

### **1.3.2 Definitions**

### **1.3.3 Examples**

### **1.3.4 Evaluation**

## **1.4 Fusion Calculus**

### **1.4.1 Background**

Miculan (2008)

### **1.4.2 Definitions**

### **1.4.3 Examples**

### **1.4.4 Evaluation**

## **1.5 Solos Calculus**

### **1.5.1 Background**

Laneve and Victor (1999) Ehrhard and Laurent (2010)

### **1.5.2 Definitions**

### **1.5.3 Examples**

### **1.5.4 Solos Diagrams**

Laneve et al. (2001)

## 2 Technology

### 2.1 Calculus Reduction

### 2.2 Diagram Visualisation

Graf et al. (2008)

## 3 References

- Ehrhard, Thomas and Laurent, Olivier. Acyclic Solos and Differential Interaction Nets. In *Logical Methods in Computer Science*, vol. 6(3):1–36 (2010). ISSN 18605974.
- Graf, Sabine, Lin, Taiyu and Kinshuk, Taiyu. The relationship between learning styles and cognitive traits Getting additional information for improving student modelling. In *Computers in Human Behavior*, vol. 24(2):122–137 (2008). ISSN 0747-5632.
- Laneve, Cosimo, Parrow, Joachim and Victor, Björn. Solo Diagrams. In *Theoretical Aspects of Computer Software: 4th International Symposium, TACS 2001 Sendai, Japan, October 29–31, 2001 Proceedings*, (pp. 127–144). Springer Berlin Heidelberg (2001). ISBN 978-3-540-45500-4.
- Laneve, Cosimo and Victor, Björn. Solos in Concert. In *Automata, Languages and Programming: 26th International Colloquium, ICALP'99 Prague, Czech Republic, July 11–15, 1999 Proceedings*, (pp. 513–523). Springer Berlin Heidelberg (1999). ISBN 978-3-540-48523-0.
- Machado, Rodrigo. An Introduction to Lambda Calculus and Functional Programming. In *Theoretical Computer Science (WEIT), 2013 2nd Workshop-School on*, (pp. 26–33). IEEE (2013). ISBN 978-1-4799-3057-9.
- Miculan, Marino. A Categorical Model of the Fusion Calculus. In *Electronic Notes in Theoretical Computer Science*, vol. 218(1):275–293 (2008). ISSN 1571-0661.
- Parrow, Joachim. An Introduction to the  $\pi$ -Calculus. In *Handbook of Process Algebra*, (pp. 479–543). Elsevier Science (2001). ISBN 1-281-03639-0.
- Xu, Xian. Expressing First-Order -Calculus in Higher-Order Calculus of Communicating Systems. In *Journal of Computer Science and Technology*, vol. 24(1):122–137 (2009). ISSN 1000-9000.