

Agenda Sun Application Tuning Seminar

July 7-9, 2009

University of Coimbra
Physics Department
Rua Larga
Coimbra, Portugal

Part I - Tuning Serial Applications

Tuesday July 7 09:00 - 17:30

Wednesday July 8 09:00 - 12:30

Part II - Shared Memory Parallelization

Wednesday July 8 14:00 - 17:30

Thursday July 9 09:00 - 17:30

Instructor

Roland Rambau, Principal Field Technologist
GSE Platform Technology Team
Sun Microsystems Germany

Part I - Tuning Serial Applications

Tuesday July 7 - Morning Session

Welcome and Introduction	09:00-09:30
Prologue	09:30-10:00
The Memory Hierarchy	10:00-10:30
<i>Coffee/tea break</i>	<i>10:30-10:45</i>
Processor Architectures	10:45-11:30
The Sun Compilers - Part I	11:30-12:30
<i>Lunch break</i>	<i>12:30-14:00</i>

Tuesday July 7 - Afternoon Session

Lab 1 - Getting started and Compiler Options	14:00-14:45
Review Lab 1	14:45-15:00
<i>Coffee/tea break</i>	<i>15:00-15:15</i>
The Sun Compilers - Part II	15:15-16:30
Demo - Performance Analyzer	16:30-16:45
The Sun Performance Analyzer	16:45-17:30

Wednesday July 8 - Morning Session

<i>Review of first day and demos</i>	<i>09:00-09:15</i>
Serial Optimization Techniques	09:15-10:30
<i>Coffee/tea break</i>	<i>10:30-10:45</i>
Performance Tuning Case Studies	10:45-11:30
Lab 2 - Performance Analyzer	11:30-12:15
Review Lab 2	12:15-12:30
<i>Lunch break</i>	<i>12:30-14:00</i>

Part II - Shared Memory Parallelization

Wednesday July 8 - Afternoon Session

Introduction into Parallelization - Part I	14:00-15:00
<i>Coffee/tea break</i>	<i>15:00-15:15</i>
Introduction into Parallelization - Part II	15:15-15:45
Automatic Parallelization	15:45-16:15
Lab 3 - Automatic Parallelization	16:15-16:45
Review Lab 3	16:45-17:00
Overview of OpenMP – Part I	17:00-17:30

Thursday July 9 - Morning Session

<i>Review of second day and demos</i>	<i>09:00-09:15</i>
Overview of OpenMP – Part II	09:15-10:30
<i>Coffee/tea break</i>	<i>10:30-10:45</i>
Lab 4 - Parallelization with OpenMP, Part I	10:45-12:30
<i>Lunch break</i>	<i>12:30-14:00</i>

Thursday July 9 - Afternoon Session

Lab 4 - Parallelization with OpenMP, Part II	14:00-15:00
<i>Coffee/tea break</i>	<i>15:00-15:15</i>
Overview of OpenMP – Part III	15:15-15:45
OpenMP and Performance - Part I	15:45-16:15
Lab 4 - Parallelization with OpenMP, Part III	16:15-16:45
Lab 5 - OpenMP performance tuning (for more experienced users)	
Review Lab 4 and Lab 5	16:45-17:00
OpenMP and Performance - Part II	17:00-17:30

Close Of Seminar