

# HSC Physics Kickstart Workshops

and

## New Horizons: Science Teachers Workshop 2008

**WAGGA WAGGA 22 - 23 July • DUBBO 25 July • ARMIDALE 28 - 29 July**

### HSC Physics Kickstart Workshops

Kickstart workshops are half-day hands-on workshops for HSC Physics students, run by the University of Sydney. In small groups your class is led by a dynamic student demonstrator from the School of Physics through highlights of the syllabus: the Meissner effect, AC induction motors, The Michelson-Morley experiment, Hertz's experiment, and more.

Each workshop is 2.5 hours long and addresses specific dot points from one module of the syllabus, using equipment from the University of Sydney labs. There will also be 45 minute lunchtime lectures on Relativity. More details at [www.physics.usyd.edu.au/schools\\_community/kickstart.shtml](http://www.physics.usyd.edu.au/schools_community/kickstart.shtml)

#### Motors and Generators

- Motor Effect
- Lenz's Law
- Generators
- Transformers
- AC Induction Motors

#### And also...

- Michelson Morley experiment
- Wilson Cloud Chamber

#### Ideas to Implementations

- Hertz's experiment
- Cathode Rays
- Photoelectric Effect
- Semiconductors
- Superconductors and the Meissner effect

#### DAILY TIMETABLE - STUDENTS:

8.45 am - 11.30 am	Workshop
12 pm - 12.45 pm	Lecture
1 pm - 3.30 pm	Workshop

### New Horizons: Science Teachers' Workshop 2008

The Science Teachers' Workshop will focus on the NSW Physics syllabus, giving you a chance to improve your understanding of physics, share classroom tips and tricks and learn new ways to get your students excited about physics. The Workshop includes a lecture series covering physics concepts and hands-on sessions providing practical ideas. Classroom resources are also provided.

#### VENUES

- Wagga Wagga Christian School
- Dubbo College Senior Campus
- University of New England



*Also:  
Primary  
shows &  
public talks -  
Details on  
Page 2*

Science Teachers' Workshop attendees are provided with lunch, morning and afternoon tea, and also can attend the lunchtime lecture at no additional charge. More details at [www.physics.usyd.edu/foundation](http://www.physics.usyd.edu/foundation)

#### DAILY TIMETABLE - TEACHERS:

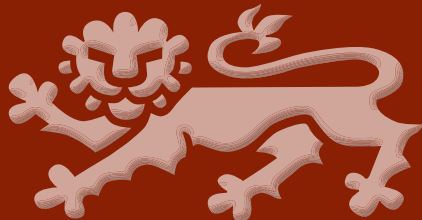
8.30 am - 9 am	Registration
9 am - 10 am	Lecture/Workshop session
10 am - 10.30 am	Morning tea
11 am - 12 pm	Lecture/Workshop session
12 pm - 1 pm	Lunch (and optional Lecture)
1 pm - 2 pm	Lecture/Workshop session
2 pm - 2.30 pm	Afternoon tea
2.30 pm - 3.30 pm	Lecture/Workshop session



**The University of Sydney  
School of Physics**

STW2008: Alex Viglienzone  
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Email: [alexv@physics.usyd.edu.au](mailto:alexv@physics.usyd.edu.au)

Kickstart: Lara Davis  
Phone: 02 9351 3383  
Fax: 02 9351 7726  
Email: [outreach@physics.usyd.edu.au](mailto:outreach@physics.usyd.edu.au)



# HSC Physics Kickstart Workshops Registration Form

Fax: 02 9351 7726 ~ Email: outreach@physics.usyd.edu.au  
Mail: Lara Davis, Physics A28, University of Sydney NSW 2006

**Bookings Close: Friday 27 June**

School name:				Phone:	
Address:				Fax:	
Teacher's name:			Email:		
Phone (M):		Phone (H):		No. of Students:	
Venue (please tick one):	<input type="checkbox"/> Wagga Wagga	<input type="checkbox"/> Dubbo	<input type="checkbox"/> Armidale		

## Attendance details:

STUDENTS	Timeslot	Module (tick one per timeslot)	No of Students	Cost
DAY 1: Wagga: Tue 22 July Dubbo: Fri 25 July Armidale: Mon 28 July	Workshop 1: 8.45 - 11:30am	<input type="checkbox"/> Ideas to Implementations <input type="checkbox"/> Motors & Generators		@\$15 =
	Lecture: 12 - 12:45pm	<input type="checkbox"/> Relativity		@\$5 =
	Workshop 2: 1 - 3:30pm	<input type="checkbox"/> Ideas to Implementations <input type="checkbox"/> Motors & Generators		@\$15 =
DAY 2: Wagga: Wed 23 July Dubbo: N/A Armidale: Tue 29 July	Workshop 1: 8.45 - 11:30am	<input type="checkbox"/> Ideas to Implementations <input type="checkbox"/> Motors & Generators		@\$15 =
	Lecture: 12 - 12:45pm	<input type="checkbox"/> Relativity		@\$5 =
	Workshop 2: 1 - 3:30pm	<input type="checkbox"/> Ideas to Implementations <input type="checkbox"/> Motors & Generators		@\$15 =

## **MORE FREE PHYSICS !** The AIR SHOW: Primary show      Nobel Prize 2007: Public lecture

Wagga Wagga Christian School	Tues 22nd July, 4.15 - 5 pm	Tues 22nd July 6 - 7 pm
Dubbo College Senior Campus	Fri 25th July, 4.15 - 5 pm	Fri 25th July 6 - 7 pm
University of New England	Mon 28th July, 4.15 - 5 pm	Sun 27th July 6 - 7 pm

Details at [www.physics.usyd.edu.au/schools\\_community/kickstart.shtml](http://www.physics.usyd.edu.au/schools_community/kickstart.shtml)

## TAX INVOICE

ABN: 15 211 513 464

Please find attached a cheque, made payable to The University of Sydney for \$\_\_\_\_\_

OR, Please debit my credit card for \$\_\_\_\_\_  Mastercard  Visa

Name on card: \_\_\_\_\_ Card number: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Expiry date: \_\_ / \_\_ (mm/yy) Signature of Card holder: \_\_\_\_\_

**Thank you for your booking - a confirmation with venue details will be sent out before the day.**



The University of Sydney  
School of Physics

\*No GST is charged for Kickstart programs



# New Horizons

The Science Teachers' Workshop 2008

## Registration Form for Regional Workshops

Fax: 02 9351 7726 ~ Email: alexv@physics.usyd.edu.au

Mail: Alex Viglienzzone, Physics A28, University of Sydney NSW 2006

**Wagga Wagga: 22-23 July Dubbo: 25 July Armidale: 28-29 July**

### Registration details

Early-bird registration, before 31 May: \$200 inc GST for two days, \$155 inc GST for one day

After 31st May: \$220 inc GST for two days, \$175 inc GST for one day

Two people from the same school may each register for one day for the cost of a two-day registration. In this case, two forms, one for each attendee, must accompany the single payment.

### Attendance details

Venue	Day (Early bird/standard price)	No. of Teachers
Wagga Wagga 22-23 July	<input type="checkbox"/> Both days (\$200/\$220)	
	<input type="checkbox"/> 22nd July only (\$155/\$175)	
	<input type="checkbox"/> 23rd July only (\$155/\$175)	
Dubbo 25 July	<input type="checkbox"/> 25th July only (\$155/\$175)	
Armidale 28 - 29 July	<input type="checkbox"/> Both days (\$200/\$220)	
	<input type="checkbox"/> 28th July only (\$155/\$175)	
	<input type="checkbox"/> 29th July only (\$155/\$175)	

I will attend the  
lunchtime lecture

Lunch is provided  
(please indicate dietary  
requirements,  
e.g. vegetarian):  
\_\_\_\_\_

### Your details

Title: \_\_\_\_\_ Given name: \_\_\_\_\_ Family name: \_\_\_\_\_

Name to appear on your nametag: \_\_\_\_\_

School: \_\_\_\_\_

School address: \_\_\_\_\_

Suburb/Town: \_\_\_\_\_ State: \_\_\_\_\_ Postcode: \_\_\_\_\_

School phone: \_\_\_\_\_ School fax: \_\_\_\_\_

Your email: \_\_\_\_\_

I  do  do not give permission for the above contact details to be disseminated to all other participants of the STW2008. (If you do not answer this question we will assume that you do NOT give permission.)

Signature: \_\_\_\_\_

### TAX INVOICE

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OR, Please debit my credit card for \$\_\_\_\_\_  Mastercard  Visa

Name on card: \_\_\_\_\_ Card number: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ / \_\_\_\_

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