# Olivier: ten first years of research

Olivier's ten first years of research

THE ASTROPHYSICAL JOURNAL, 350: L1-L4, 1990 February 10

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### 3CR 208.1: A RADIO-LOUD QUASAR AT z = 1.02 GRAVITATIONALLY AMPLIFIED BY A FOREGROUND SEYFERT GALAXY AT z = 0.159

O. LE FÈVRE Canada-France-Hawaii Telescope Corporation; and Paris-Meudon Observatory

AND

F. HAMMER<sup>1</sup> Paris-Meudon Observatory Received 1989 September 7; accepted 1989 November 14

## **CFHT** images

Astron. Astrophys. 208, L7-L10 (1989)

*Letter to the Editor* 

208L...7H

1989A&A

**ASTRONOMY** AND ASTROPHYSICS

### Probable additional gravitational images related to the Cl 2244-02 arc and B, V, R photometry of the cluster core\*

F. Hammer<sup>1</sup>, O. Le Fèvre<sup>1, 2</sup>, J. Jones<sup>2</sup>, F. Rigaut<sup>1</sup>, and G. Soucail<sup>3</sup>

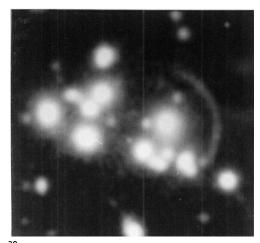
<sup>1</sup> D.A.E.C., Observatoire de Meudon, F-92195 Meudon Principal Cédex, France

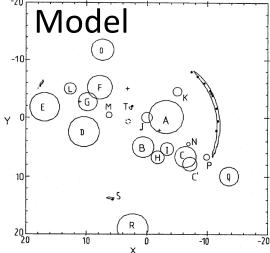
<sup>2</sup> C.F.H.T., P.O. Box 1597, Kamuela, HI 96743, USA

<sup>3</sup> Observatoire de Toulouse, 14 Av. E. Belin, F-31400 Toulouse, France

Received July 5, accepted September 27, 1988

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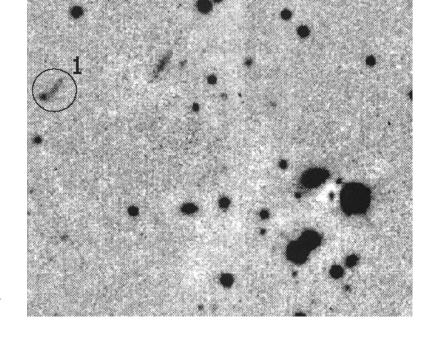


# Gravitational lensing

THE ASTROPHYSICAL JOURNAL, 422:L5–L8, 1994 February 10 © 1994. The American Astronomical Society. All rights reserved. Printed in U.S.A.

# IMAGING OF 16 DISTANT EMSS CLUSTERS WITH $z \ge 0.2$ AND $L_{X,44} \ge 4$ : NEW ARCS AND FIRST CONSEQUENCES<sup>1</sup>

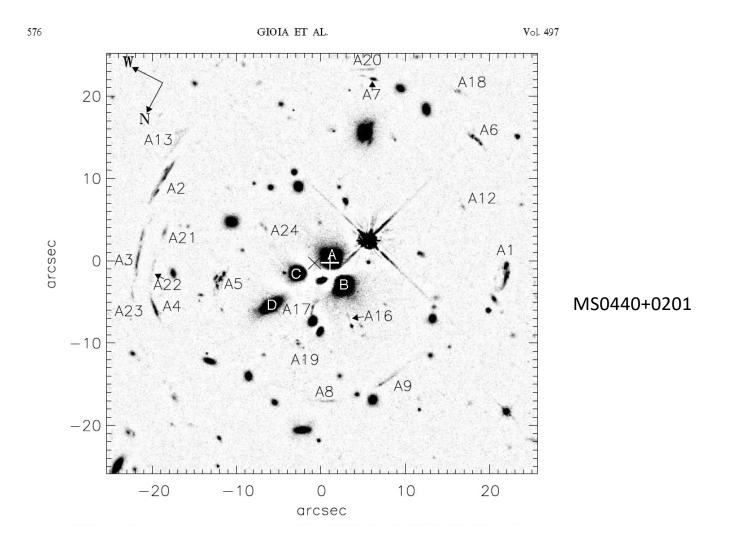
O. LE FÈVRE,<sup>2,3</sup> F. HAMMER,<sup>2,3</sup> M. C. ANGONIN,<sup>3</sup> I. M. GIOIA,<sup>4,5,6</sup> AND G. A. LUPPINO<sup>4</sup> Received 1993 September 13; accepted 1993 November 15



## **CFHT** images

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# Gravitational lensing: a Space telescope program



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Radio galaxies at z > 1

THE ASTROPHYSICAL JOURNAL, 333:L37–L40, 1988 October 15 © 1988. The American Astronomical Society. All rights reserved. Printed in U.S.A.

IMAGING OF VERY DISTANT 3CR GALAXIES: HIGH SPATIAL RESOLUTION DATA FOR SEVEN GALAXIES WITH  $1.176 \le z \le 1.841$ 

O. LE Fèvre<sup>1</sup> Canada-France-Hawaii Telescope Corporation; and Paris-Meudon Observatory

AND

F. HAMMER<sup>1</sup> Paris-Meudon Observatory Received 1988 May 2; accepted 1988 July 14

THE ASTROPHYSICAL JOURNAL, 374:91–102, 1991 June 10 © 1991. The American Astronomical Society. All rights reserved. Printed in U.S.A.

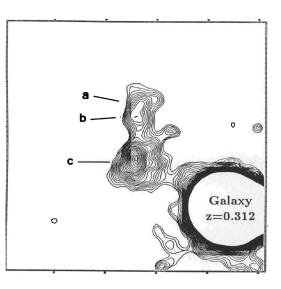
> DEEP SPECTROSCOPY UNDER HIGH SPATIAL RESOLUTION OF THE HIGH-REDSHIFT RADIO SOURCE 3CR 368: THE MONSTER ELUCIDATED

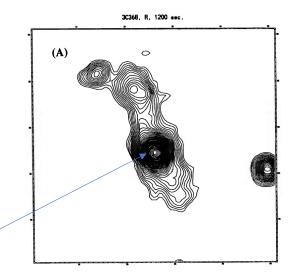
> > F. HAMMER<sup>1</sup> DAEC, Observatoire de Paris-Meudon, 92195 Meudon Principal Cedex, France

O. LE FÈVRE<sup>1, 2</sup> Canada-France-Hawaii Telescope Corporation, P.O. Box 1597, Kamuela, HI 96743

AND

D. PROUST<sup>1</sup> DAEC, Observatoire de Paris-Meudon, 92195 Meudon Principal Cedex, France Received 1990 June 18; accepted 1990 December 5





Radio galaxies at z > 1

THE ASTROPHYSICAL JOURNAL, 333:L37–L40, 1988 October 15 © 1988. The American Astronomical Society. All rights reserved. Printed in U.S.A.

IMAGING OF VERY DISTANT 3CR GALAXIES: HIGH SPATIAL RESOLUTION DATA FOR SEVEN GALAXIES WITH  $1.176 \le z \le 1.841$ 

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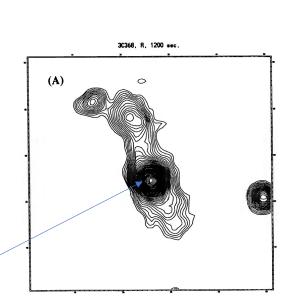
> DEEP SPECTROSCOPY UNDER HIGH SPATIAL RESOLUTION OF THE HIGH-REDSHIFT RADIO SOURCE 3CR 368: THE MONSTER ELUCIDATED

> > F. HAMMER<sup>1</sup> DAEC, Observatoire de Paris-Meudon, 92195 Meudon Principal Cedex, France

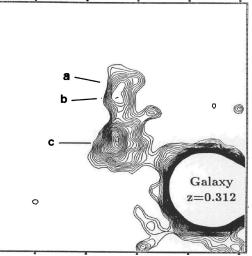
O. LE FÈVRE<sup>1, 2</sup> Canada-France-Hawaii Telescope Corporation, P.O. Box 1597, Kamuela, HI 96743

AND

D. PROUST<sup>1</sup> DAEC, Observatoire de Paris-Meudon, 92195 Meudon Principal Cedex, France Received 1990 June 18; accepted 1990 December 5



M star!



# Towards the Canada France Redshift Survey

AND

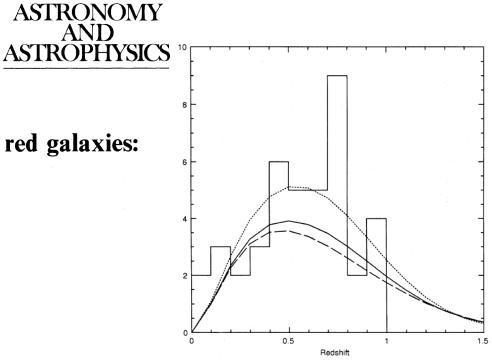
Astron. Astrophys. 277, 53–61 (1993)

### First results from a deep spectroscopic survey of faint red galaxies: clues on the nature of low redshift dwarf galaxies\*

L. Tresse<sup>1</sup>, F. Hammer<sup>2</sup>, O. Le Fèvre<sup>2</sup>, and D. Proust<sup>1</sup>

<sup>1</sup> DAEC, Observatoire de Paris-Meudon, F-92195 Meudon Principal Cedex, France <sup>2</sup> Canada-France-Hawaii Telescope Corporation, P. O. Box 1597, KAMUELA, HI 96743, USA

Received November 5, 1992; accepted March 15, 1993

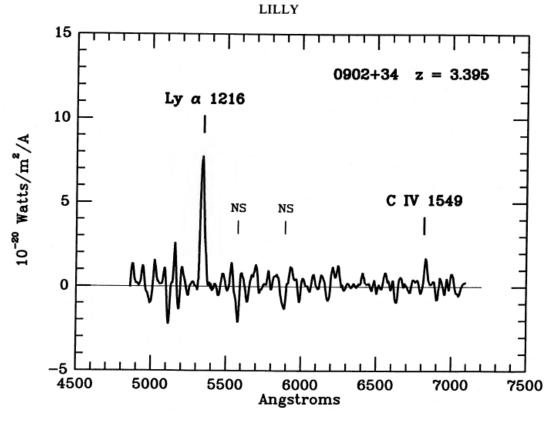


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François Hammer

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## Encountering other hunters of distant galaxies



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François Hammer

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# Then formation of the big team

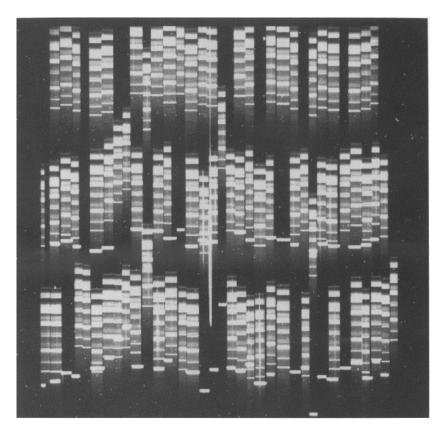


Oxford, August 1990

– then flying to Hawaii

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Team: David Crampton, François Hammer, Olivier Le Fèvre, and Simon Lilly

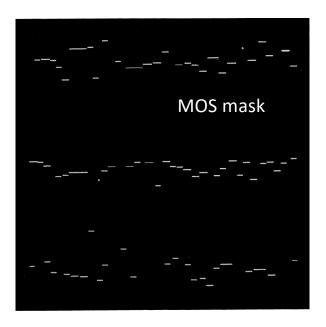


MOS spectra of CFRS galaxies (Le Fèvre et al. 1995)

- Early 90s, only few galaxies at z > 0.5 were known
- Advent of the Multi Object Spectrograph at the Canada France Hawaii Telescope
- Selection choice of galaxy targets at 814 nm (I band) allowing to sample 400 nm break 'til z=1
- First ever made study of ~ 1000 galaxies having emitted their light 6 to 8 billion years ago

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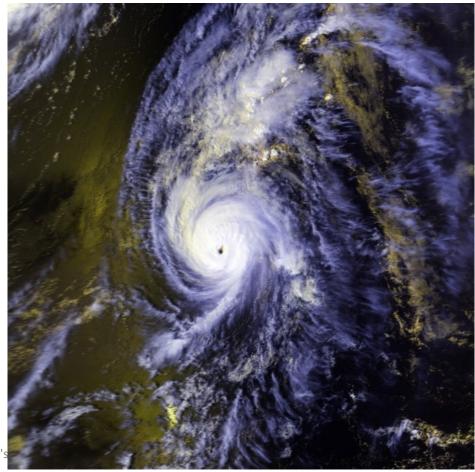
Team: David Crampton, François Hammer, Olivier Le Fèvre, and Simon Lilly



- 1000 galaxies, each spectrum analyzed by 3 members in parallel
- Debates and votes for attributing redshifts
- Make-up of the first analyzing tools for distant galaxies in imagery, photometry, spectrophotometry,
- The whole survey made in ~ 100 nights, by Olivier & I, and ~ 100 nights by David and Simon

### The Canada France Redshift Survey (1992-1999) Competition between French and Canadian teams: under the storm

Iniki: 1992

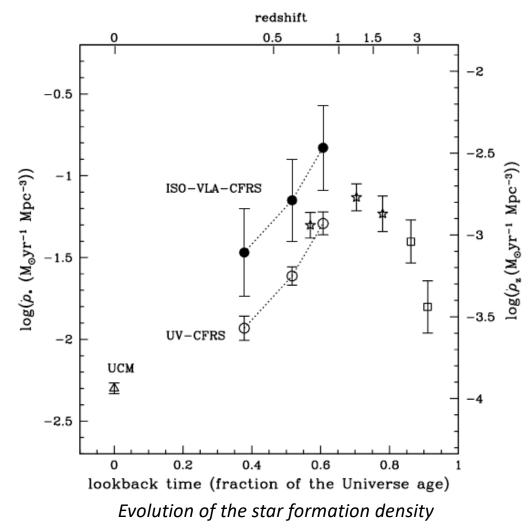






Olivier'

Team: David Crampton, François Hammer, Olivier Le Fèvre, and Simon Lilly



- Star formation density of the Universe has decreased by a factor 10 since the last 8 billion years (z= 1)
- Confirmed in infrared by a follow up study with Infrared Space Observatory (ISO)
- Followed by numerous pionnering studies of star formation rates, metallicities, morphologies, kinematics of distant galaxies

THE ASTROPHYSICAL JOURNAL, 464:79–91, 1996 June 10 © 1996. The American Astronomical Society. All rights reserved. Printed in U.S.A.

#### CANADA-FRANCE REDSHIFT SURVEY. XI. MORPHOLOGY OF HIGH-REDSHIFT FIELD GALAXIES FROM HIGH-RESOLUTION GROUND-BASED IMAGING

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> O. LE FÈVRE<sup>1</sup> AND F. HAMMER<sup>1</sup> DAEC, Observatoire de Paris Meudon, 92195 Meudon CEDEX, France

> > AND

D. CRAMPTON<sup>1</sup> Dominion Astrophysical Observatory, Victoria, Canada Received 1995 September 7; accepted 1996 January 8

# Space Telescope, large programs on distant galaxies towards larger collaborations, e.g., Ellis et al.

THE ASTROPHYSICAL JOURNAL, 499:112–133, 1998 May 20 © 1998. The American Astronomical Society. All rights reserved. Printed in U.S.A.

### HUBBLE SPACE TELESCOPE IMAGING OF THE CFRS AND LDSS REDSHIFT SURVEYS. I. MORPHOLOGICAL PROPERTIES<sup>1</sup> JARLE BRINCHMANN,<sup>2</sup> ROBERTO ABRAHAM,<sup>2</sup> DAVID SCHADE,<sup>3</sup> LAURENCE TRESSE,<sup>2</sup> RICHARD S. ELLIS,<sup>2</sup> SIMON LILLY,<sup>2,4</sup> OLIVIER LE FÈVRE,<sup>5,7</sup> KARL GLAZEBROOK,<sup>6</sup> FRANÇOIS HAMMER,<sup>7</sup> MATTHEW COLLESS,<sup>8</sup> DAVID CRAMPTON,<sup>3</sup> AND TOM BROADHURST<sup>9</sup>

Received 1997 August 8; accepted 1998 January 5

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## FLAMES/GIRAFFE

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## FLAMES/GIRAFFE

### **X-SHOOTER**

EUCLID

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### FLAMES/GIRAFFE

**X-SHOOTER** 

EUCLID

### **OPTIMOS-DIORAMAS**

**OPTIMOS-EVE** 

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### FLAMES/GIRAFFE

**X-SHOOTER** 

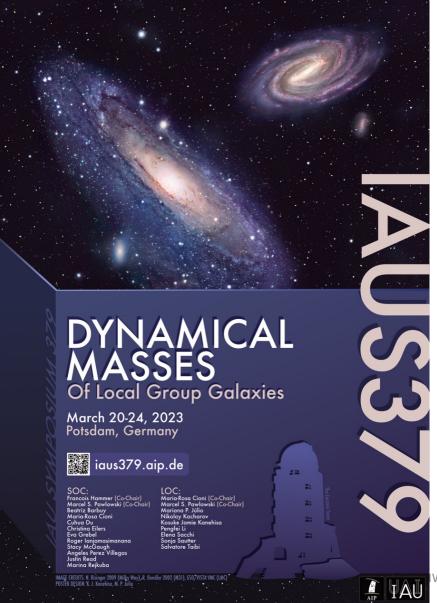
### EUCLID

### **OPTIMOS-DIORAMAS**

**OPTIMOS-EVE** 

### MOSAIC

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## Please save the date, 20-24 March 2023

IW dwarfs: a recent infall