



University of
Zurich^{UZH}

Department of Informatics

A Brief Look Back on Ifi's History and Achievements

Martin Glinz

Department Head



Let's travel back in time...

2010

A large, vibrant spiral galaxy is centered in the frame, set against a dark, star-filled background. The galaxy's core is a bright, glowing yellow and white, with spiral arms that transition through green and blue as they extend outwards. The overall appearance is ethereal and cosmic. The year '2010' is superimposed in the center of the galaxy's core in a bold, blue, sans-serif font.

Let's travel back in time...

1958





1958



Where it all began

Hans Künzi is appointed professor of
Operations Research und Elektronische Datenverarbeitung
in the Faculty of Law and Economics





1962



Four years later

The first computer at UZH: An **IBM 1620**

Storage capacity:
20'000 numbers

Addition cycle time:
600 μ s





1967



The predecessor to Ifl

Institut für Operations Research und elektronische Datenverarbeitung



E I N L A D U N G
=====

Sehr geehrte Herren,

Seit Anfang dieses Jahres befindet sich die neue elektronische Rechenmaschine der Universität Zürich und der Kantonalen Verwaltung im Betrieb. Sie ist im ebenfalls neu errichteten INSTITUT FUER OPERATIONS RESEARCH UND ELEKTRONISCHE DATENVERARBEITUNG DER UNIVERSITAET ZUERICH an der Sumatrasstrasse 30 installiert. Wir freuen uns, Sie zur E i n w e i h u n g s f e i e r der Anlage und des Instituts höflich einzuladen auf

Freitag, 26. Mai 1967, 16.00 Uhr,

◀ 1967 ▶

And a new computer

Institut für Operations Research und elektronische
Datenverarbeitung

The **IBM 360/40**

Storage capacity:

- 256 Kbyte main memory
- 29 Mbyte disk space

Addition cycle time:

- 10 μ s





1970



A department is born

Foundation of the Institut für Elektronische Datenverarbeitung

Auszug aus dem Protokoll

des Regierungsrates der
Sitzung vom 26. No

5776. Universität. Die Rechts-



Auf Antrag der Direktion des Erziehungswesens und des Erziehungsrates

beschliesst der Regierungsrat:

I. An der Rechts- und staatswissenschaftlichen Fakultät der Universität Zürich wird der Lehrstuhl für Operations Research und Elektronische Datenverarbeitung aufgeteilt in ein Ordinariat für Operations Research und ein Extraordinariat für Elektronische Datenverarbeitung. Das Institut für Operations Research und Elektronische Datenverarbeitung wird aufgeteilt in ein Institut für Operations Research und ein Institut für Elektronische Datenverarbeitung.

II. Als Extraordinarius für Elektronische Datenverarbeitung und Direktor des Instituts für Elektronische Datenverarbeitung an der Rechts- und staatswissenschaftlichen Fakultät der Universität Zürich wird auf den 16. Oktober 1970 gewählt:

PD Dr. Kurt Bauknecht, geboren 1936, von und in Zürich. Die Wahl als Extraordinarius erfolgt für eine Amtsdauer von sechs Jahren, diejenige als Direktor für den Rest der

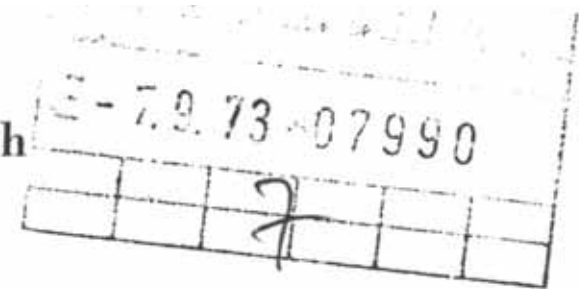
◀ 1973 ▶

A new name for an emerging discipline

The department is renamed to **Institut für Informatik**

Auszug aus dem Protokoll
des Regierungsrates des Kantons Zürich

Sitzung vom 22. August 1973



beschliesst der Regierungsrat:

I. Der Umbenennung des Instituts für elektronische Datenverarbeitung an der Rechts- und staatswissenschaftlichen Fakultät der Universität Zürich in «Institut für Informatik» wird zugestimmt.

II. An der Rechts- und staatswissenschaftlichen Fakultät der Universität Zürich wird das Extraordinariat für elektronische Datenverarbeitung in ein etatmässiges Ordinariat mit neuer Lehrumschreibung «Informatik» umgewandelt.

Pioneers elsewhere

ETH Zurich

- 1950ies Eduard Stiefel, Heinz Rutishauser, Ambros Speiser
Zuse Z4, ERMETH
- 1960ies Carl-August Zehnder, Niklaus Wirth
- 1968 Fachgruppe für Computerwissenschaften
- 1974 Institut für Informatik
- 1981 Diploma program in Informatics

The first decade: 1970-1980

Informatics is **established**

Research **thrives**

Informatics is taught as a **minor subject**

... but there is *no academic program in Informatics*

The same happened at **ETH** and other **Swiss universities**

Kurt Bauknecht makes IfI move forward
(at a department excursion)



Eventually: A Teaching milestone

1980

Foundation of an academic program in informatics: Wirtschaftsinformatik (as a part of the program in Economics and Business Administration)

| Stammkarte für Wirtschaftsinformatiker | | vertraulich |
|--|-----------------------------|-------------------------|
| Name, Vorname: | Dürst Martin | Matrikel-Nr: 81-704-660 |
| Studienrichtung: | WI | Studienbeginn: |
| Studienadresse | | Heimadresse |
| c/o | | |
| Strasse | | |
| PLZ, Ort | 8057-Zürich | 3052 Zürich |
| Telefon | 311.21.46. | |
| Seminararbeiten in Informatik | | |
| 1. Seminar | Info I: Programmiersprachen | Semester SS 85 |
| Arbeitsthema | Logo | Dozent Pa/Ma |

More teaching milestones

1980

Foundation of an academic program in informatics: Wirtschaftsinformatik (as a part of the program in Economics and BA)

1995

A program of its own: Informatics with concentration in information systems

2004

BSc and MSc in Informatics

The effect of teaching: We are proud of our alumni

in academia > 20 professors

and

in industry

Technical Experts

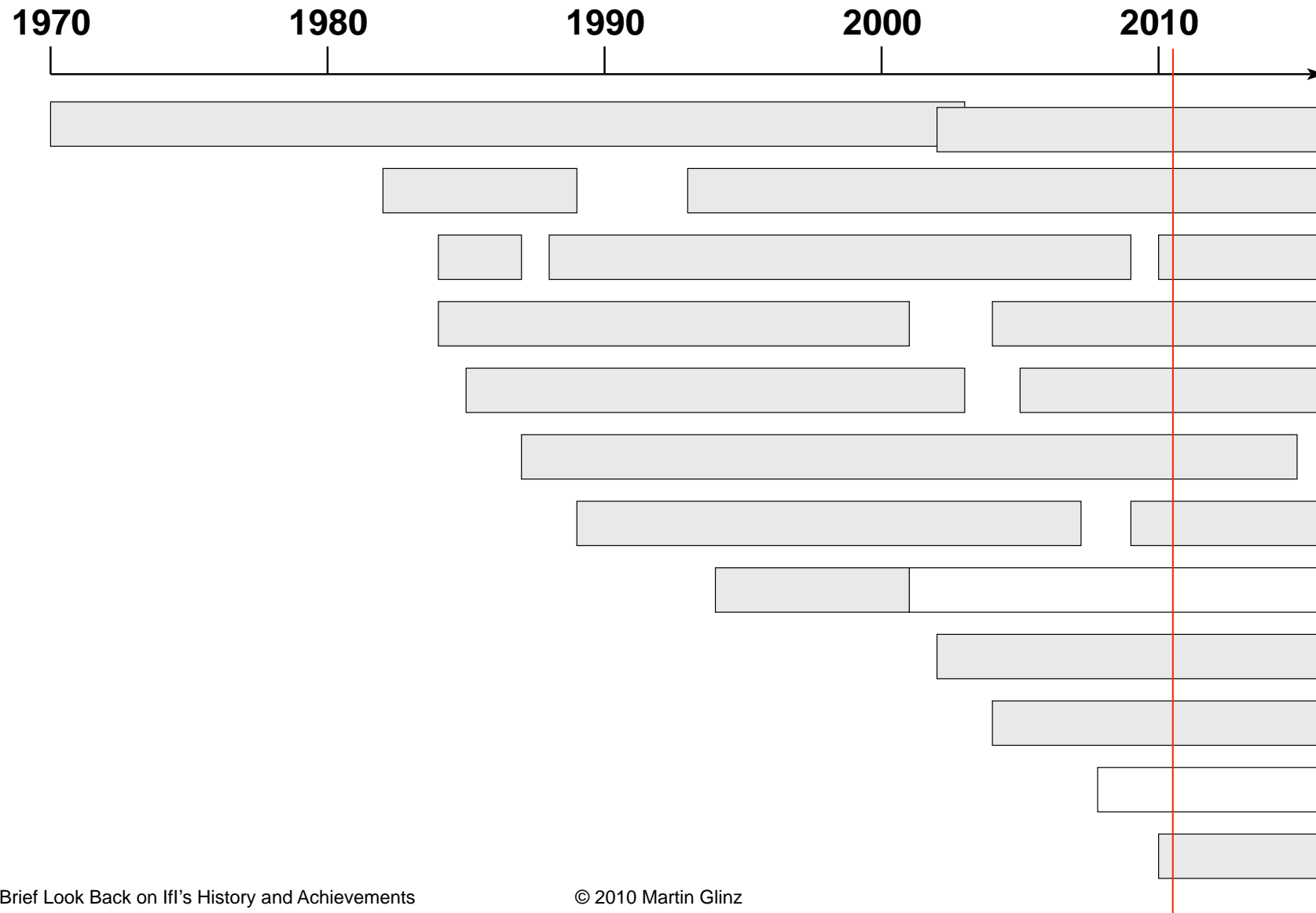
Entrepreneurs

Senior managers

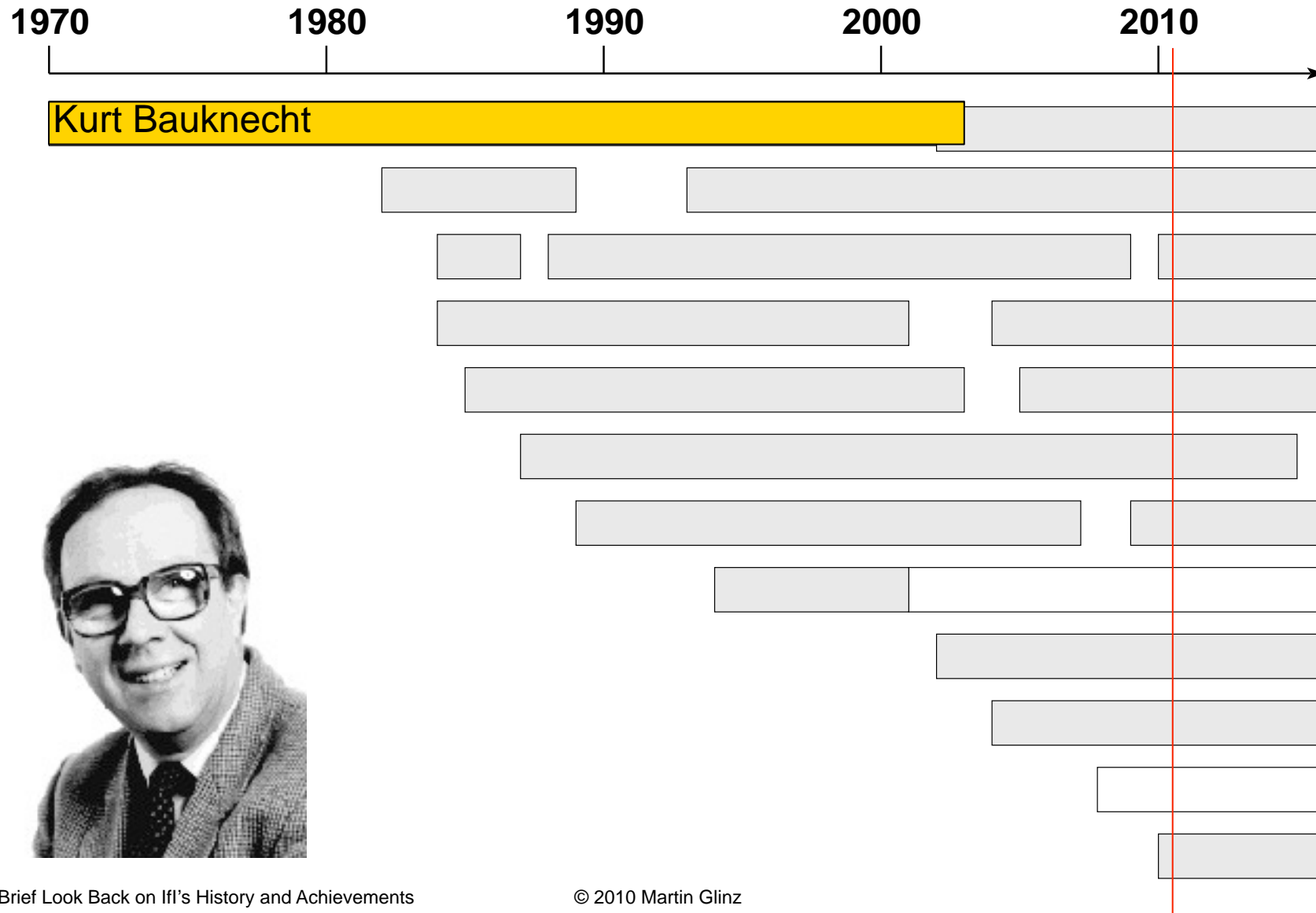
Distinguished engineers



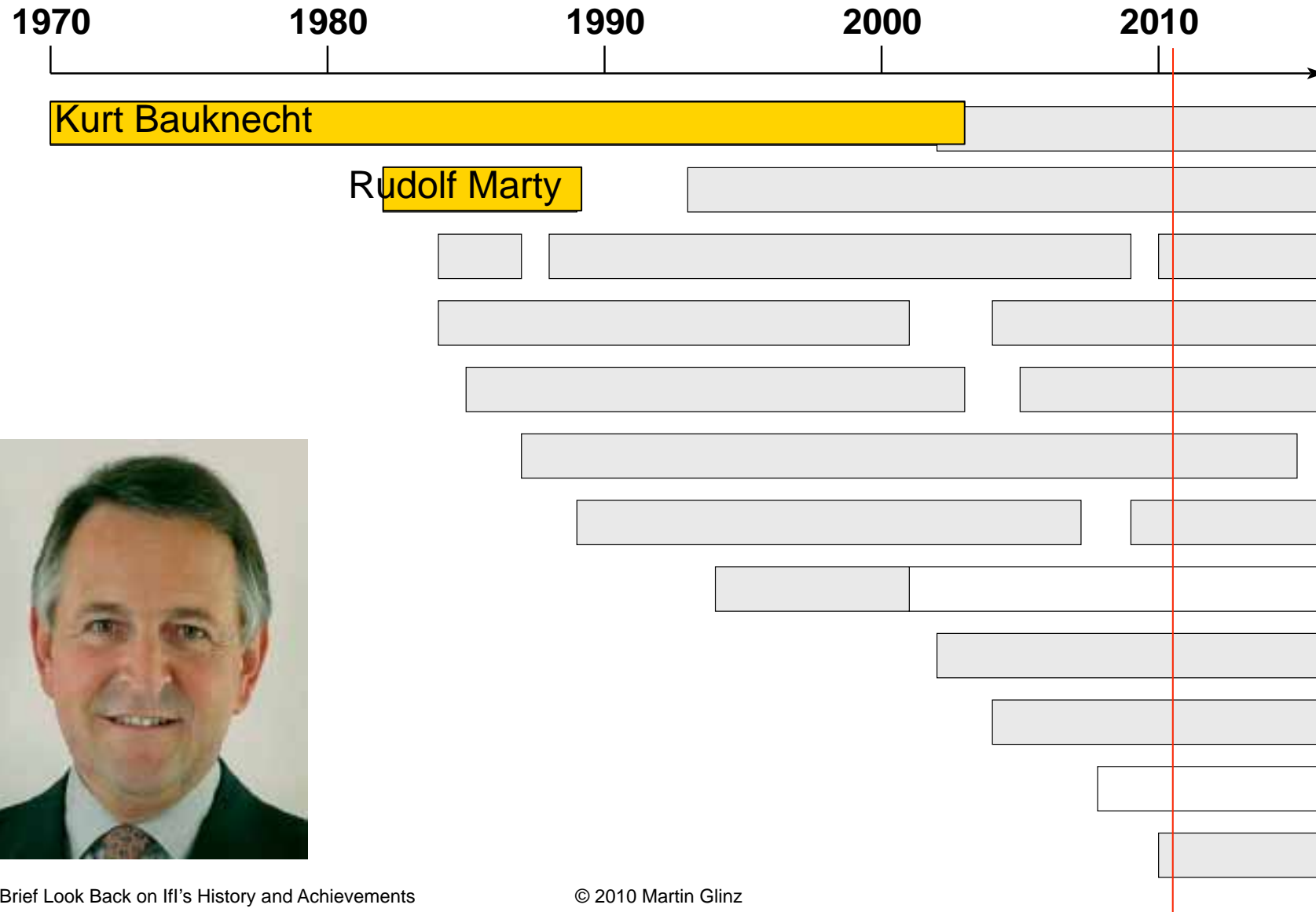
Ifl grows: Timeline of tenured Professors



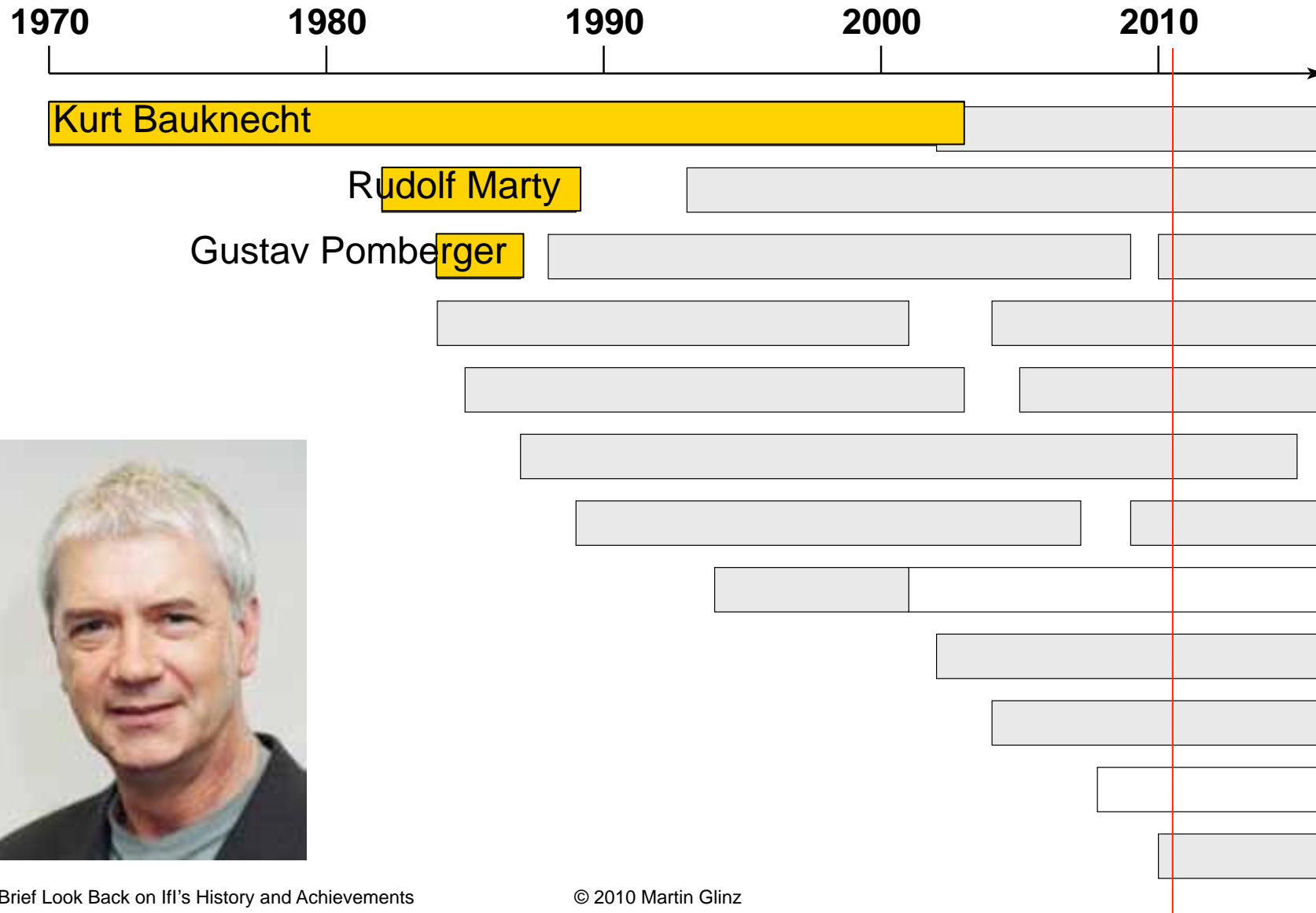
Ifl grows: Timeline of tenured Professors



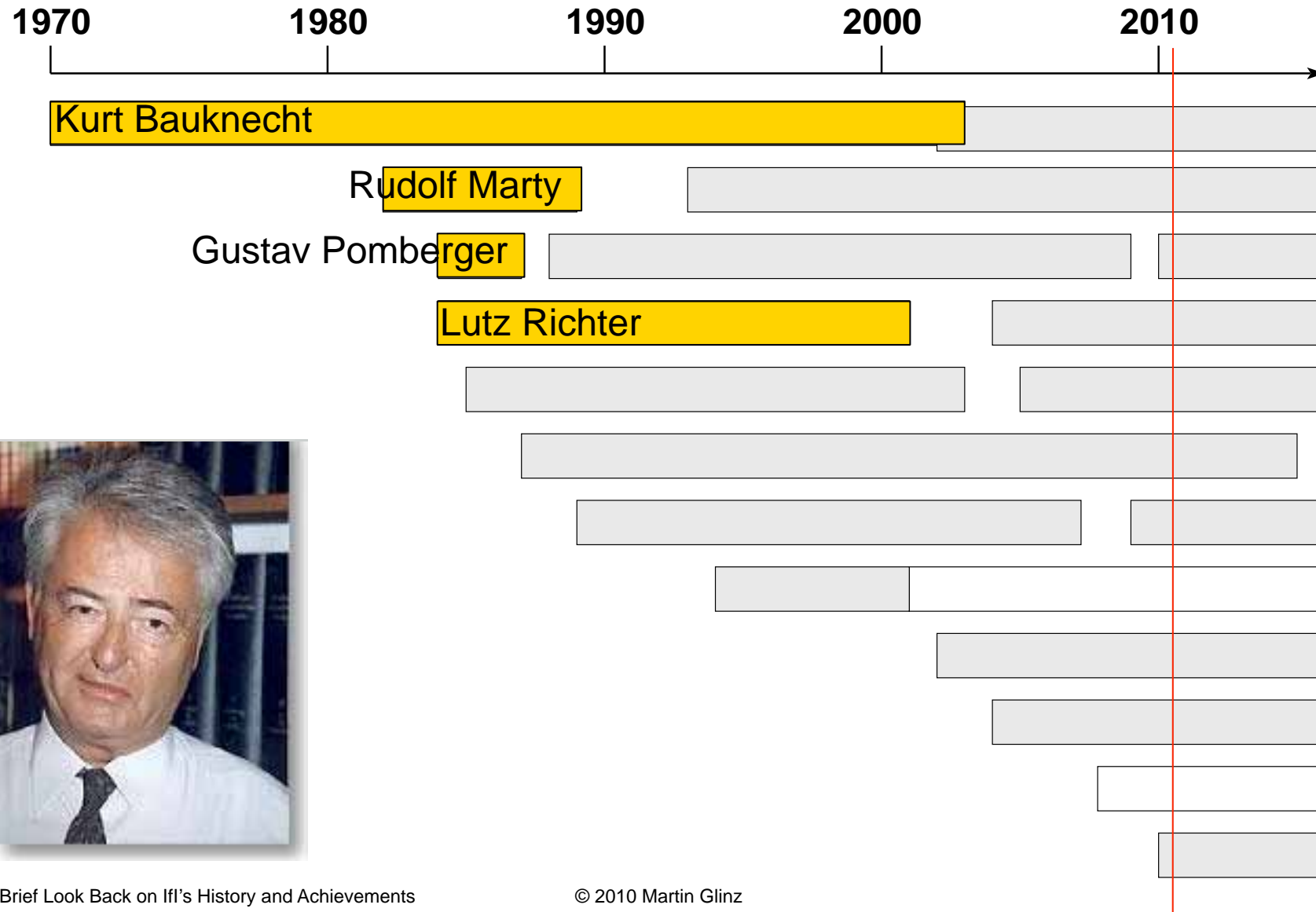
Ifl grows: Timeline of tenured Professors



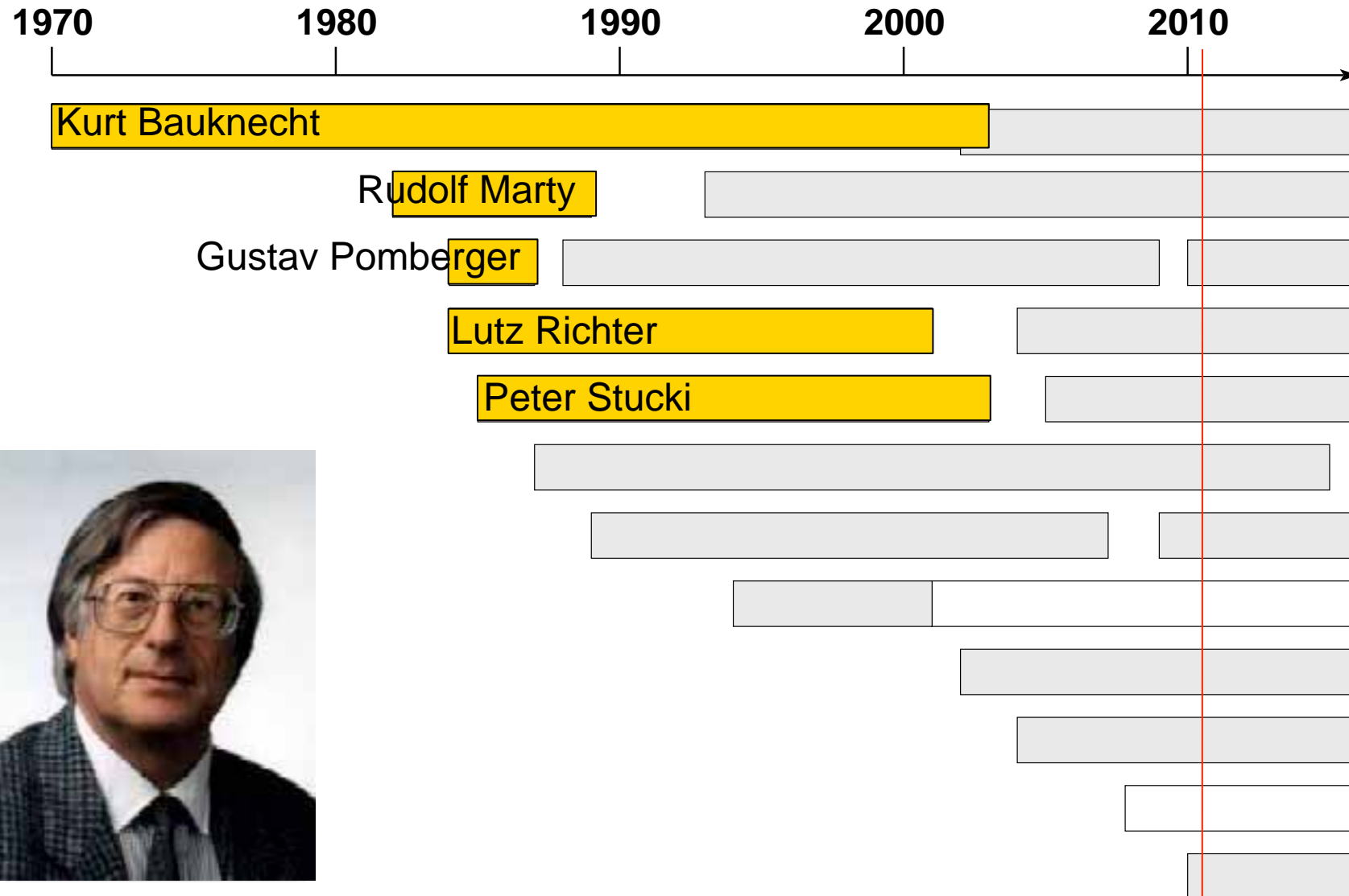
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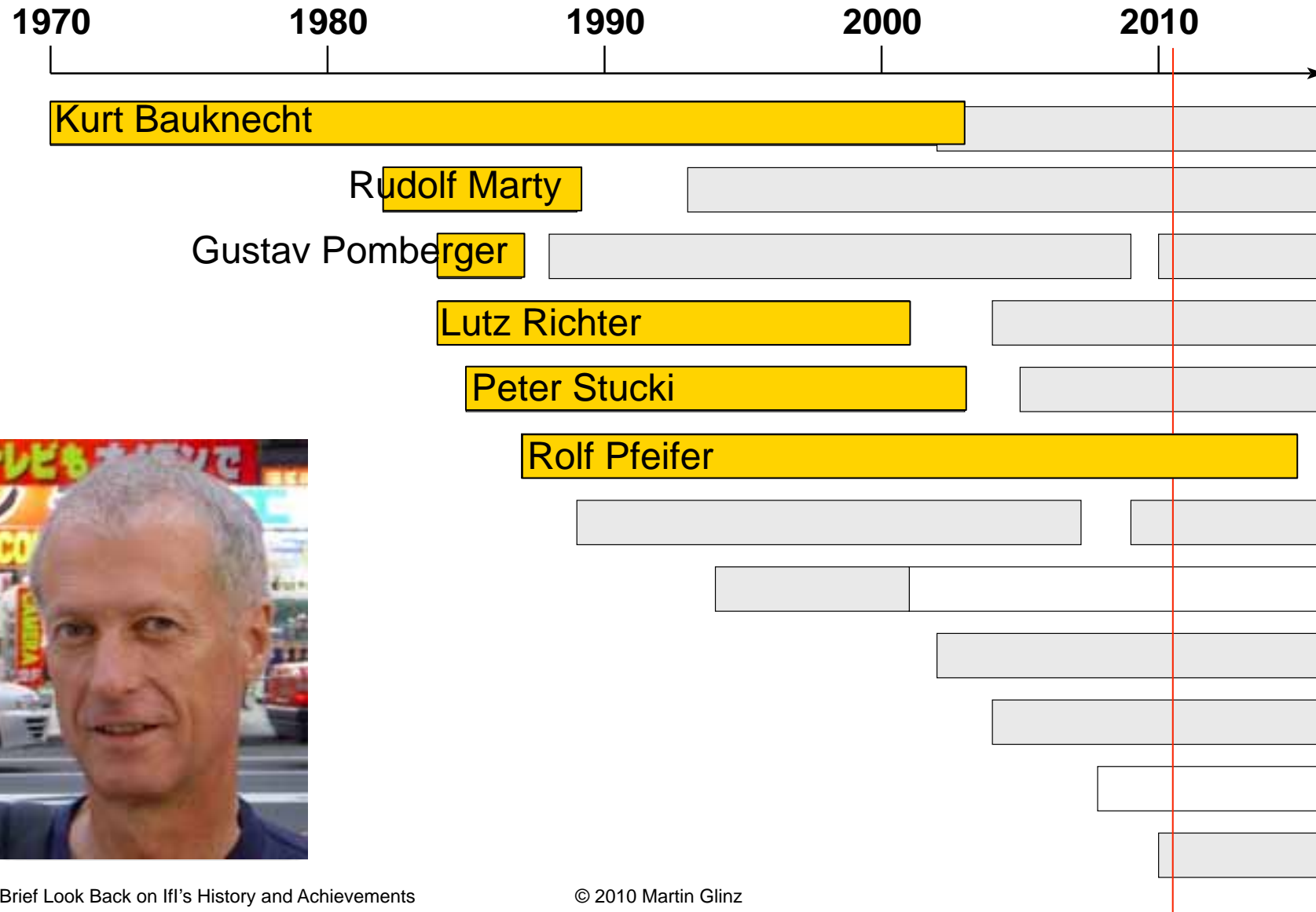
Ifl grows: Timeline of tenured Professors



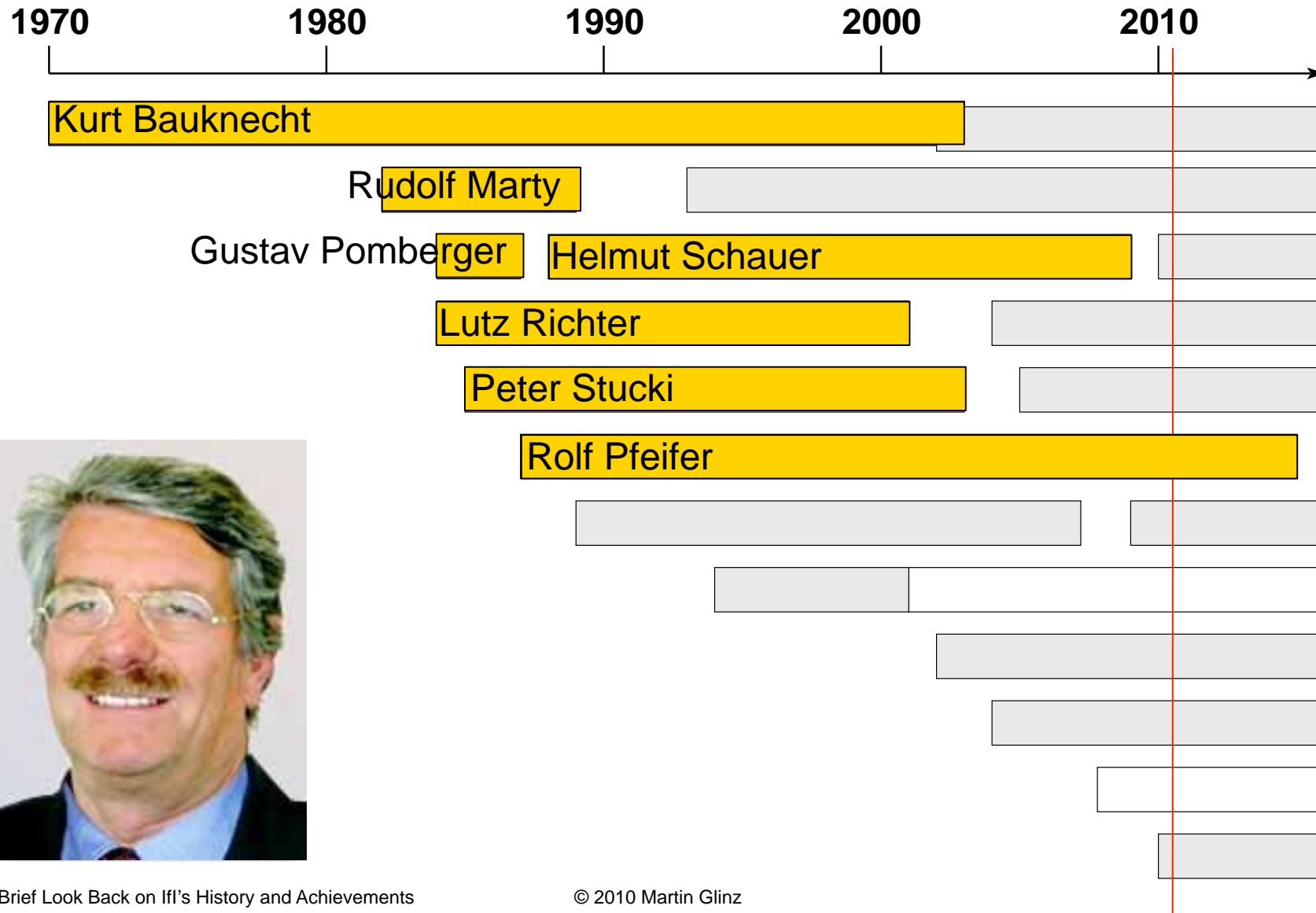
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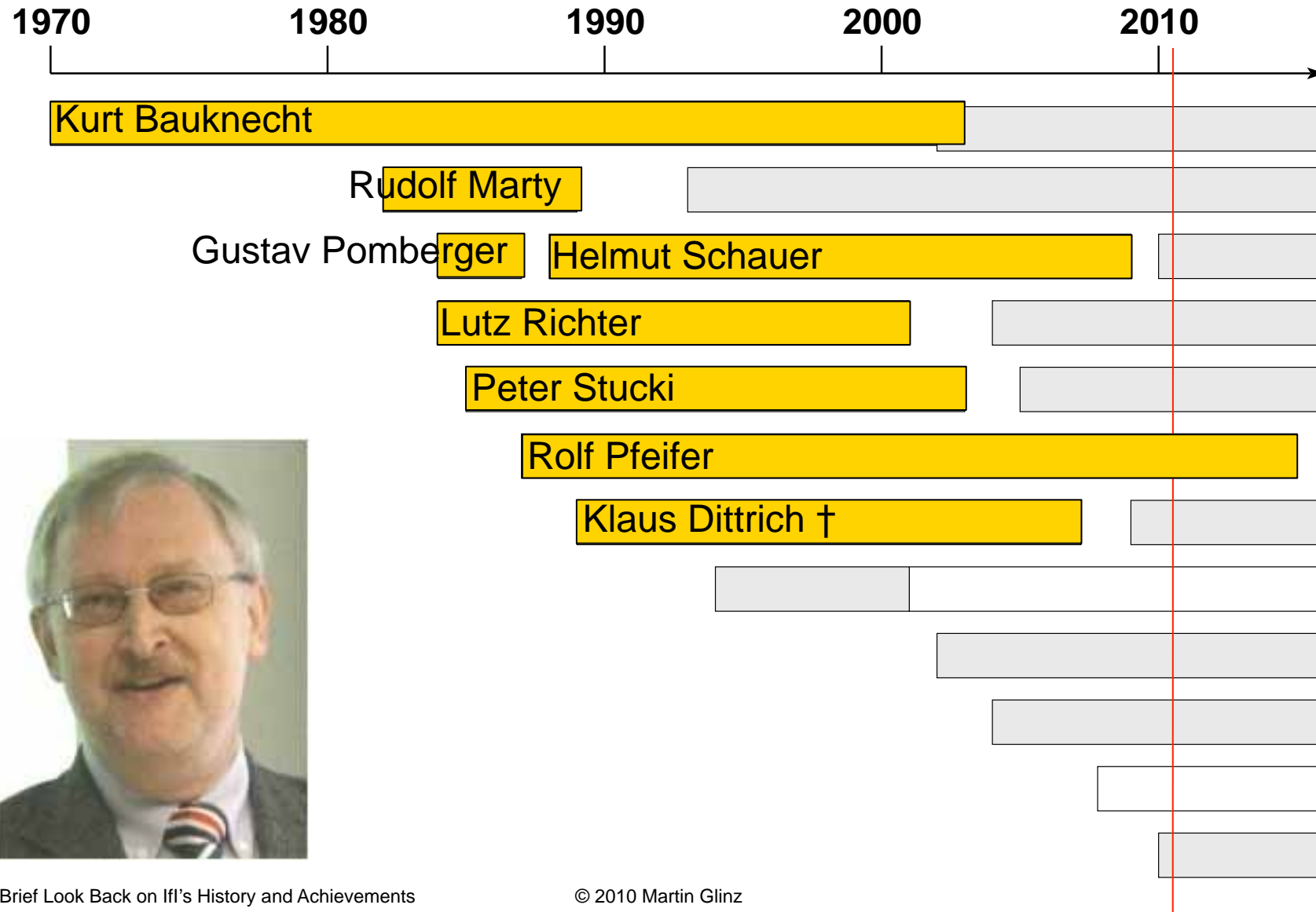
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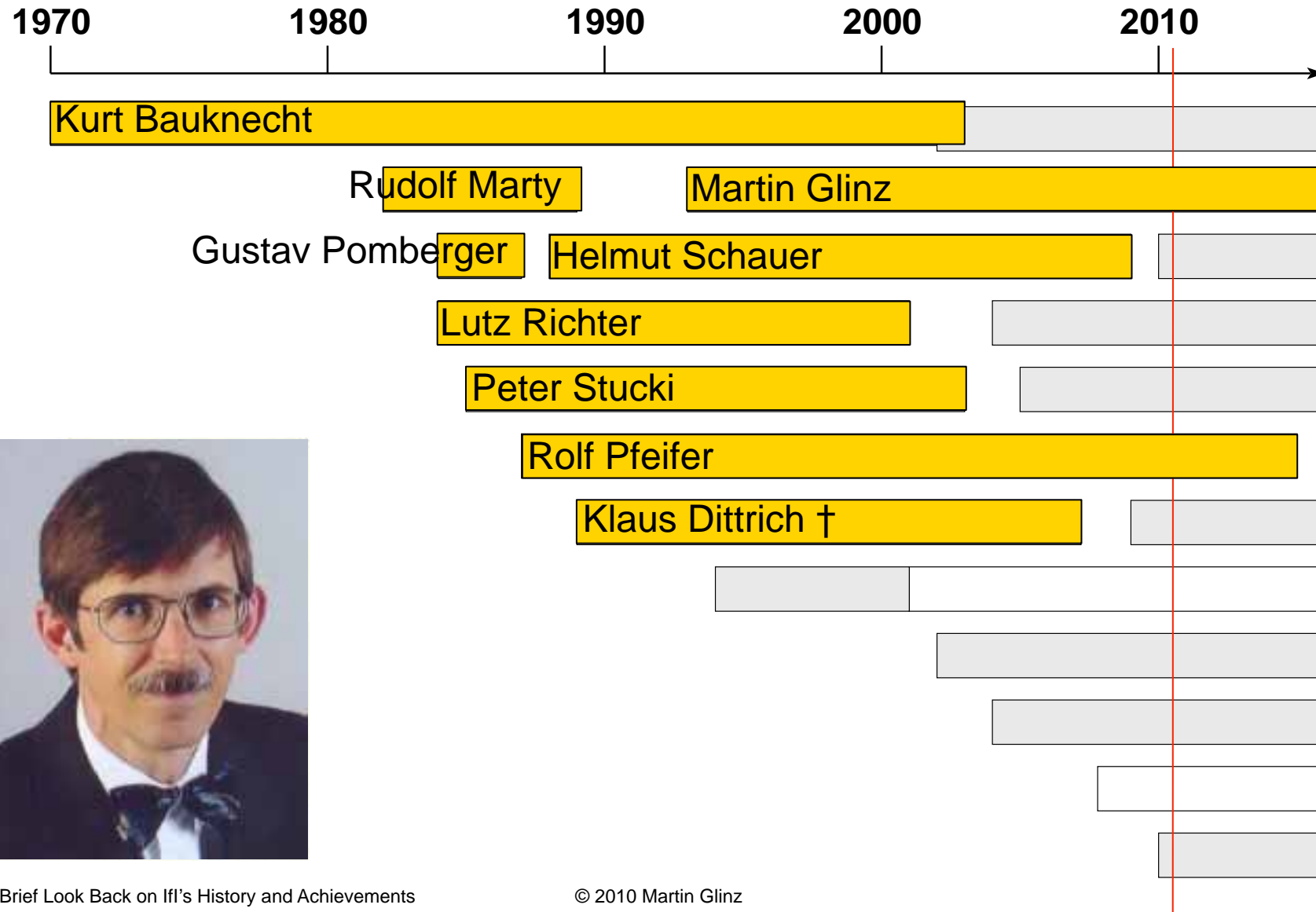
Ifl grows: Timeline of tenured Professors



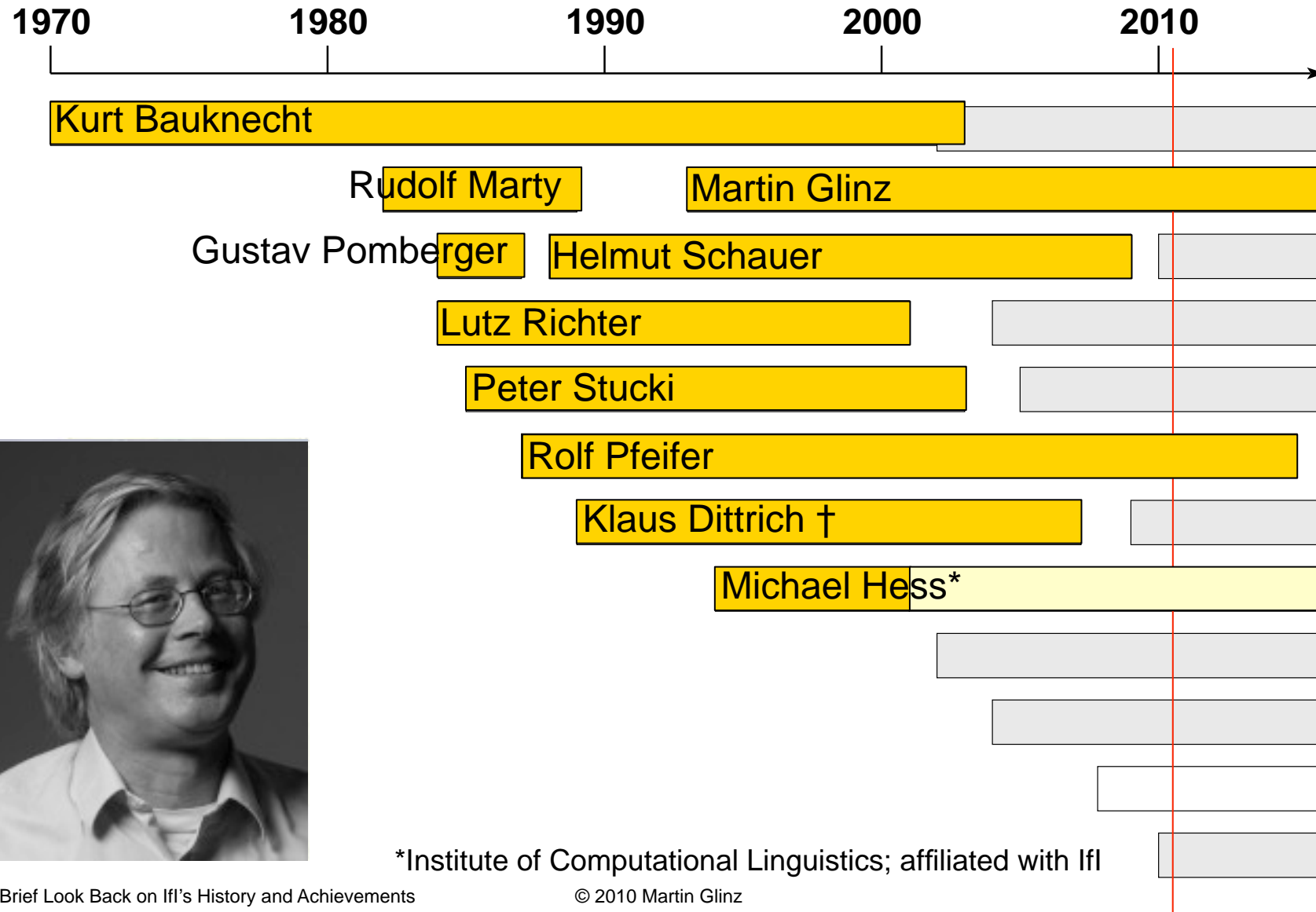
Ifl grows: Timeline of tenured Professors



Ifl grows: Timeline of tenured Professors

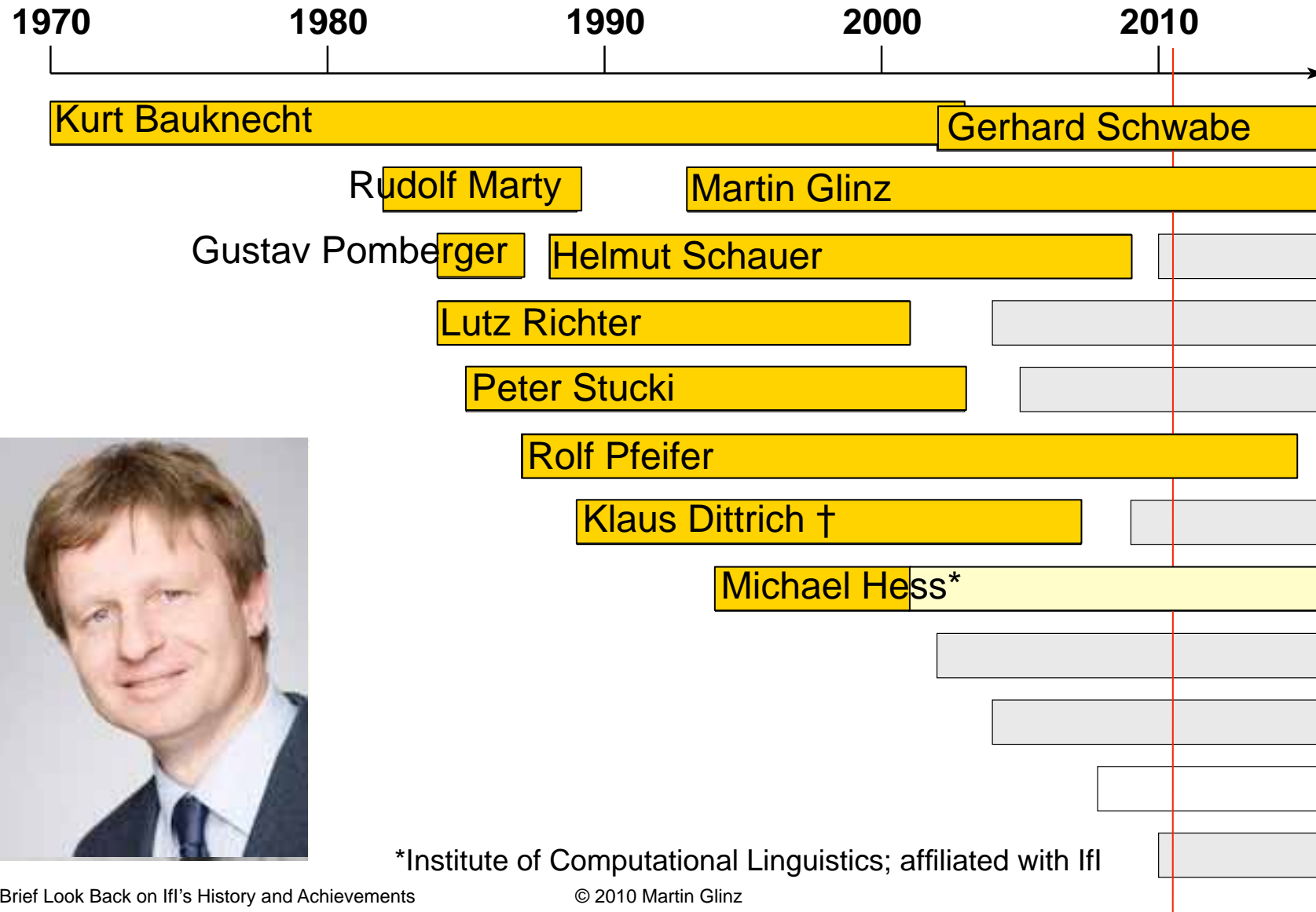


IfI grows: Timeline of tenured Professors



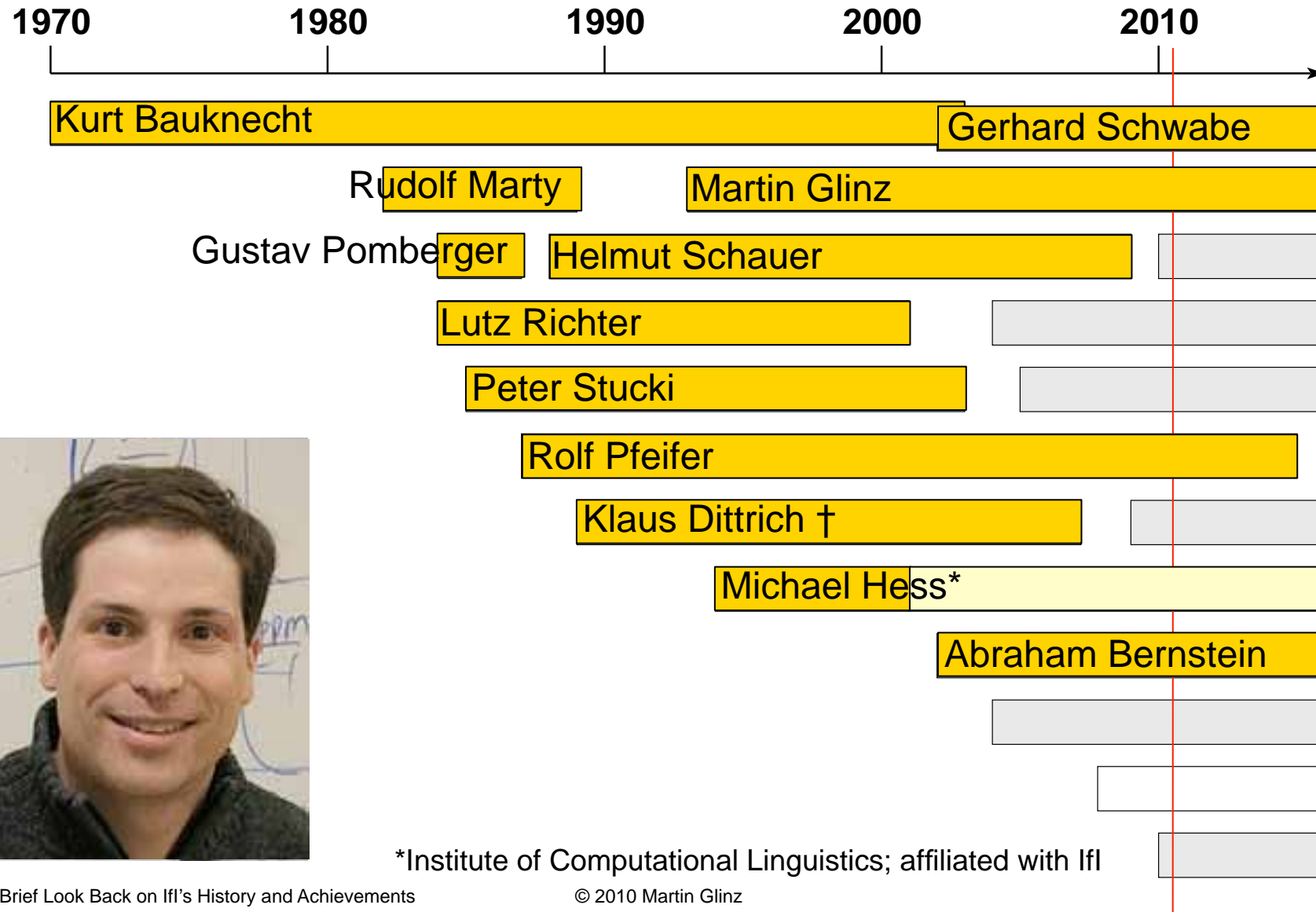
*Institute of Computational Linguistics; affiliated with IfI

IfI grows: Timeline of tenured Professors



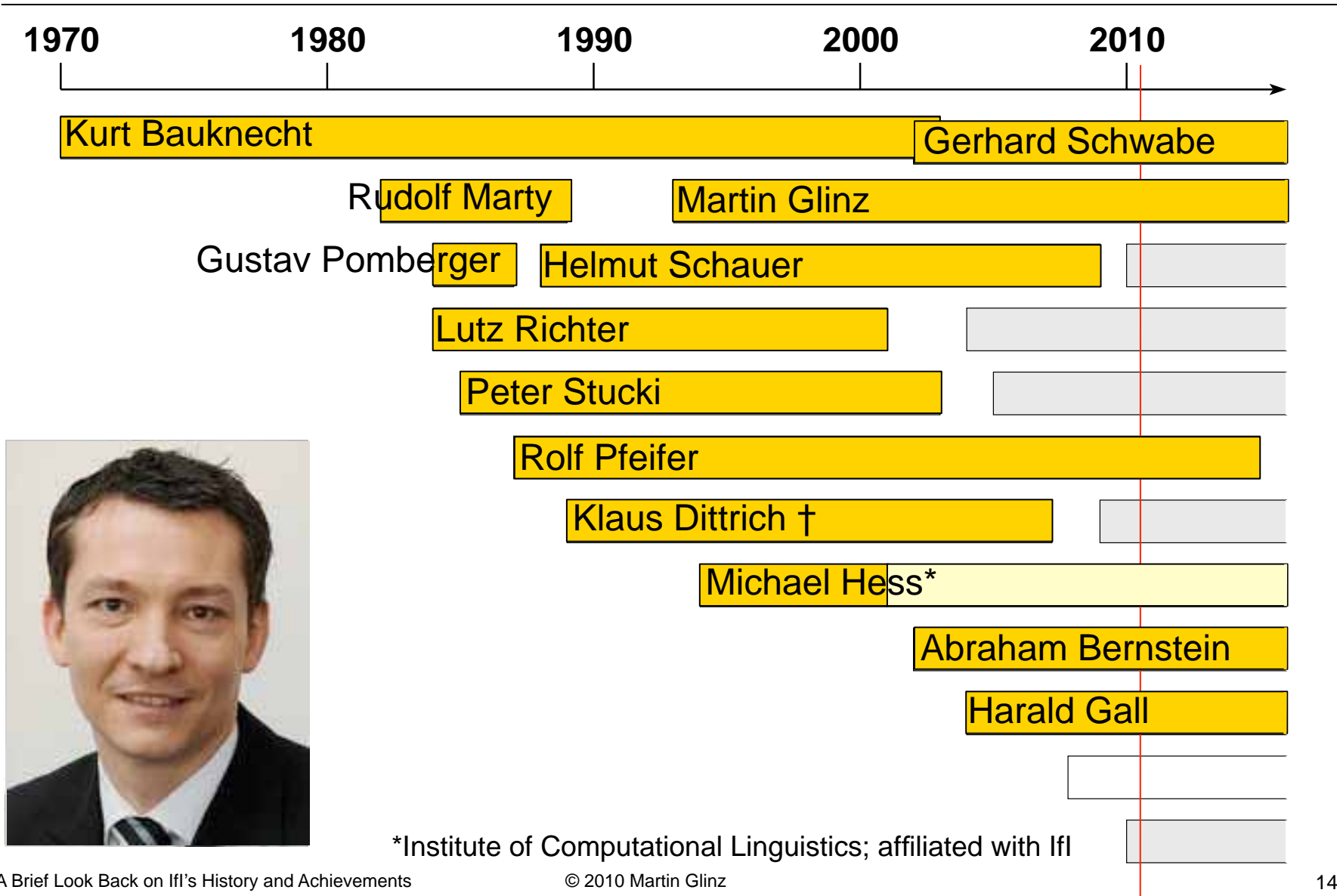
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IfI grows: Timeline of tenured Professors



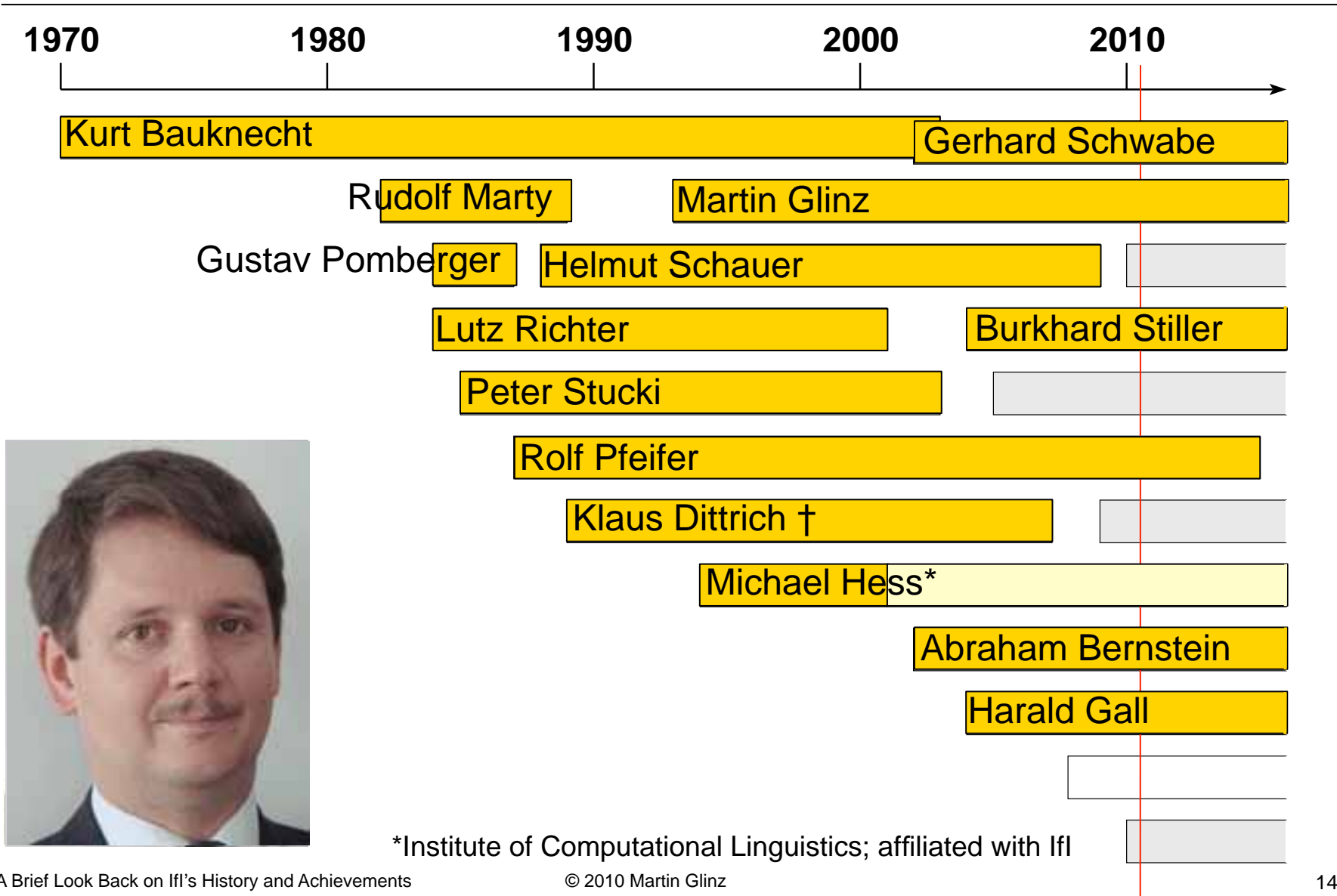
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Ifl grows: Timeline of tenured Professors



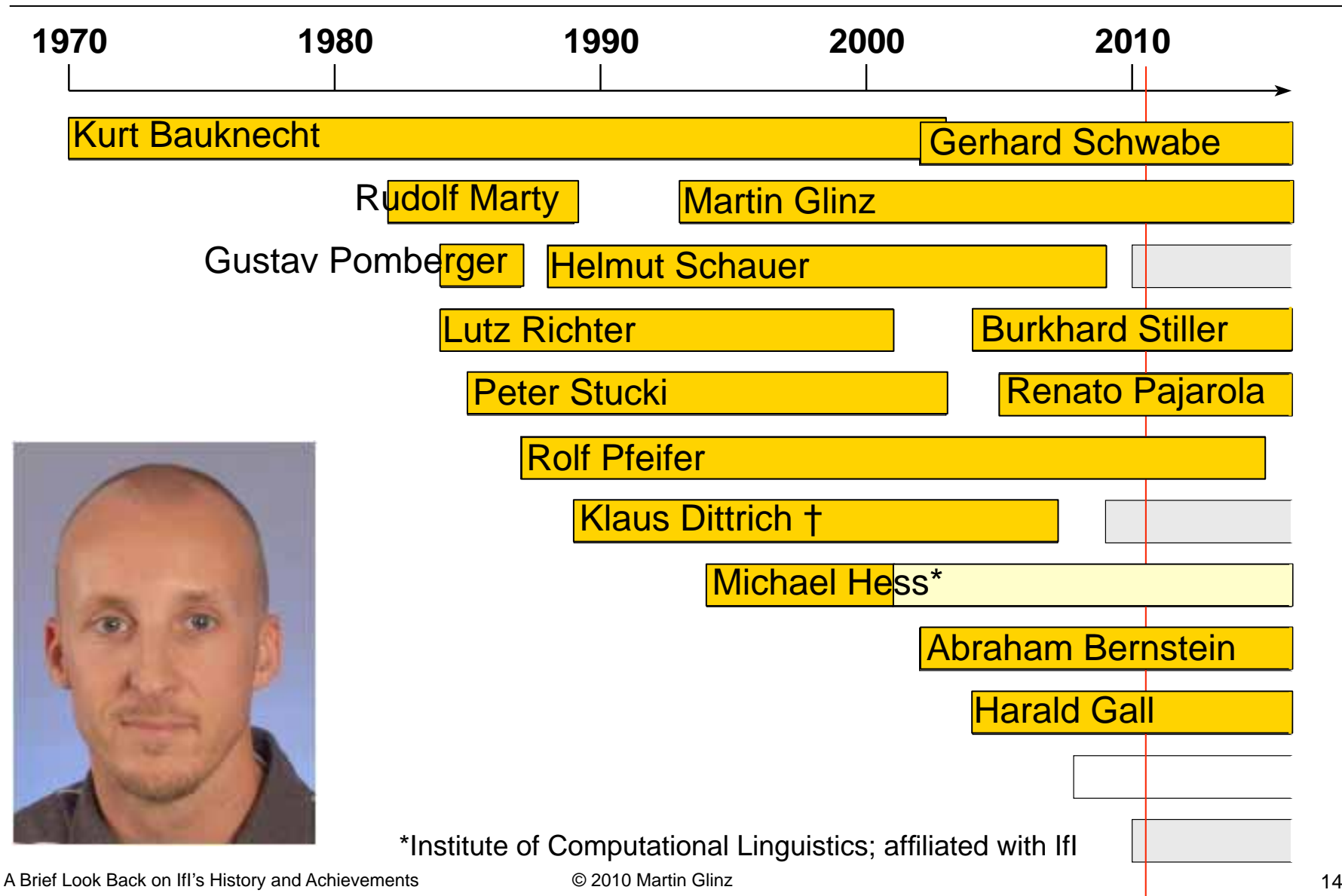
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IfI grows: Timeline of tenured Professors



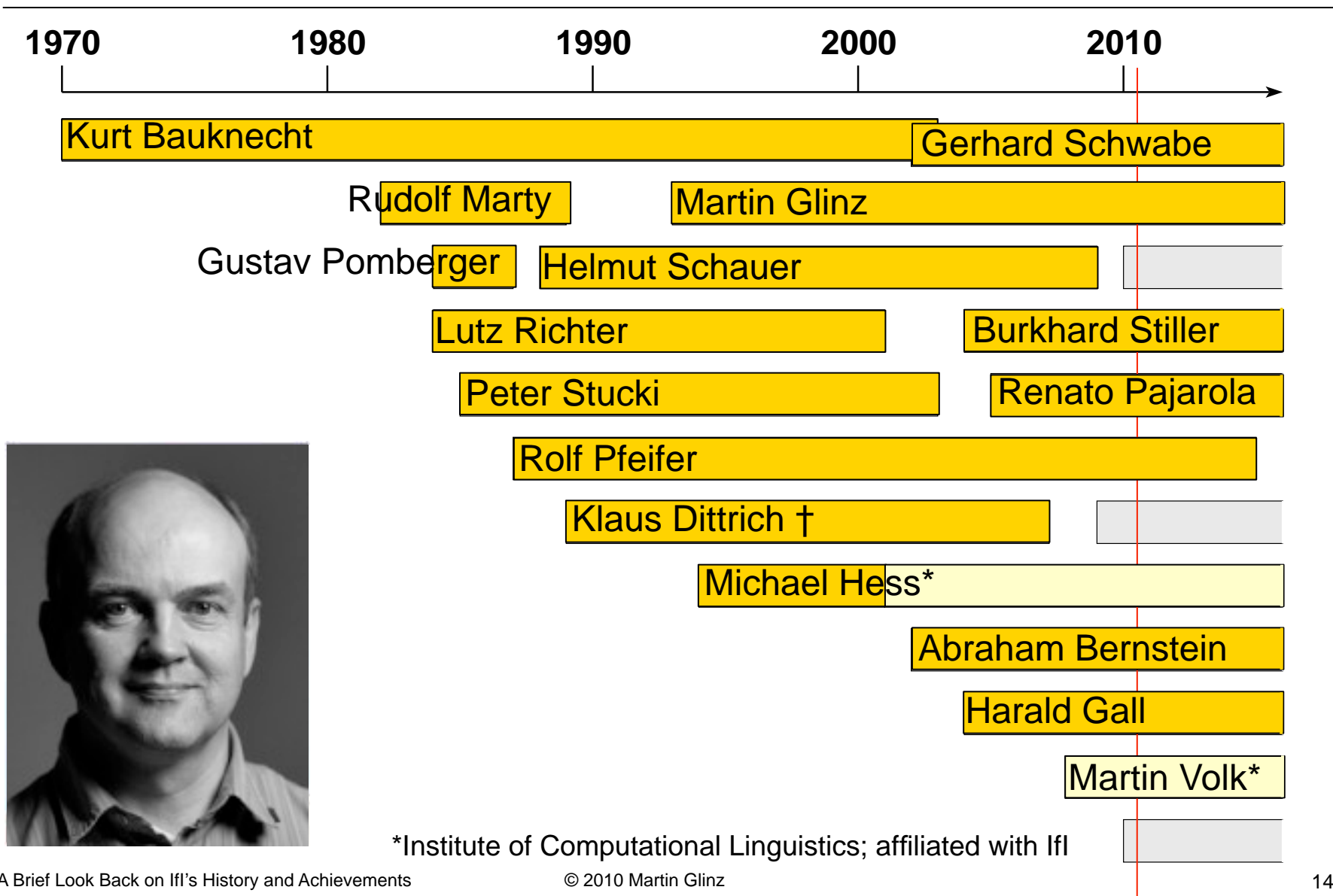
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IfI grows: Timeline of tenured Professors

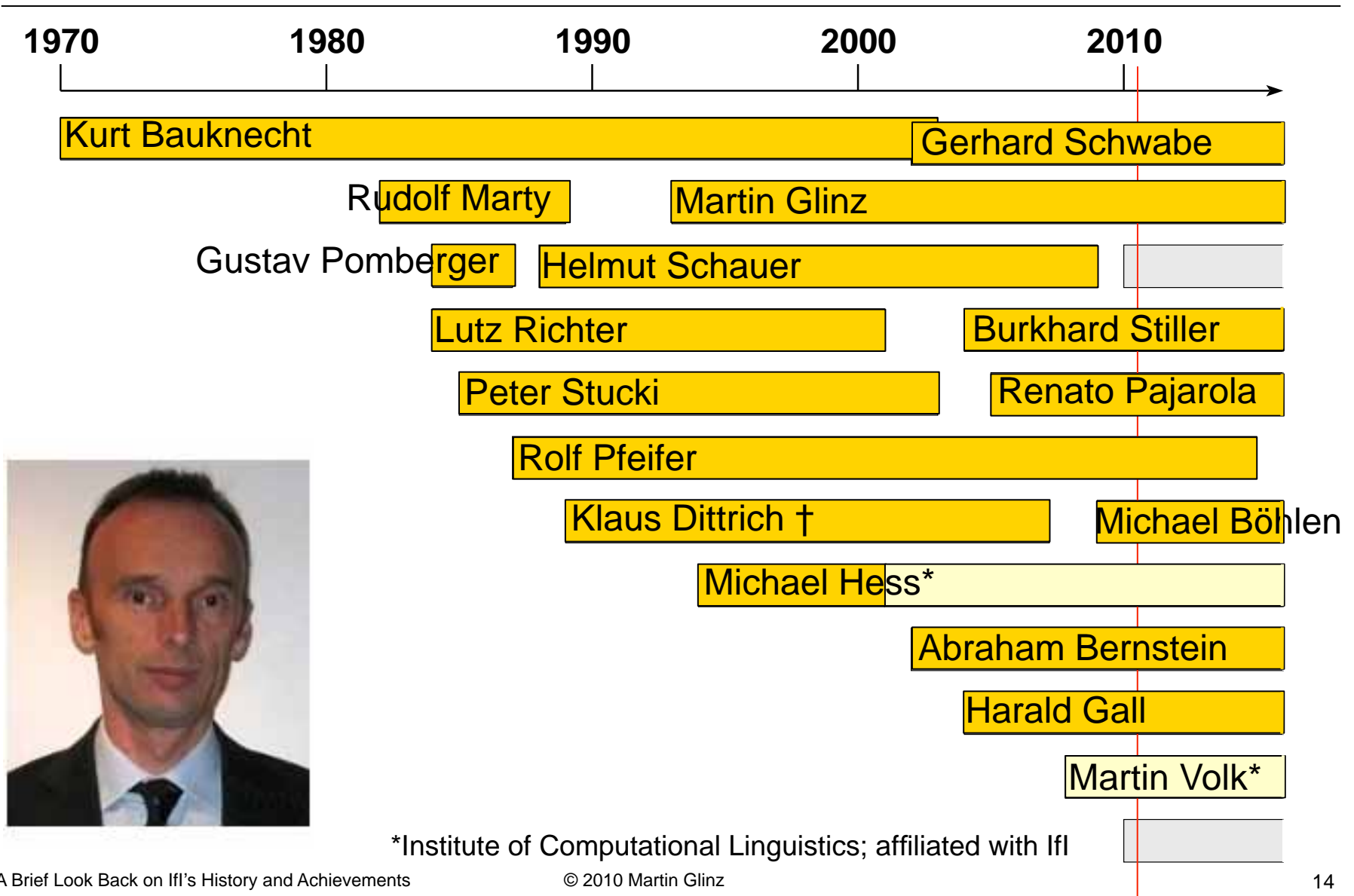


*Institute of Computational Linguistics; affiliated with IfI

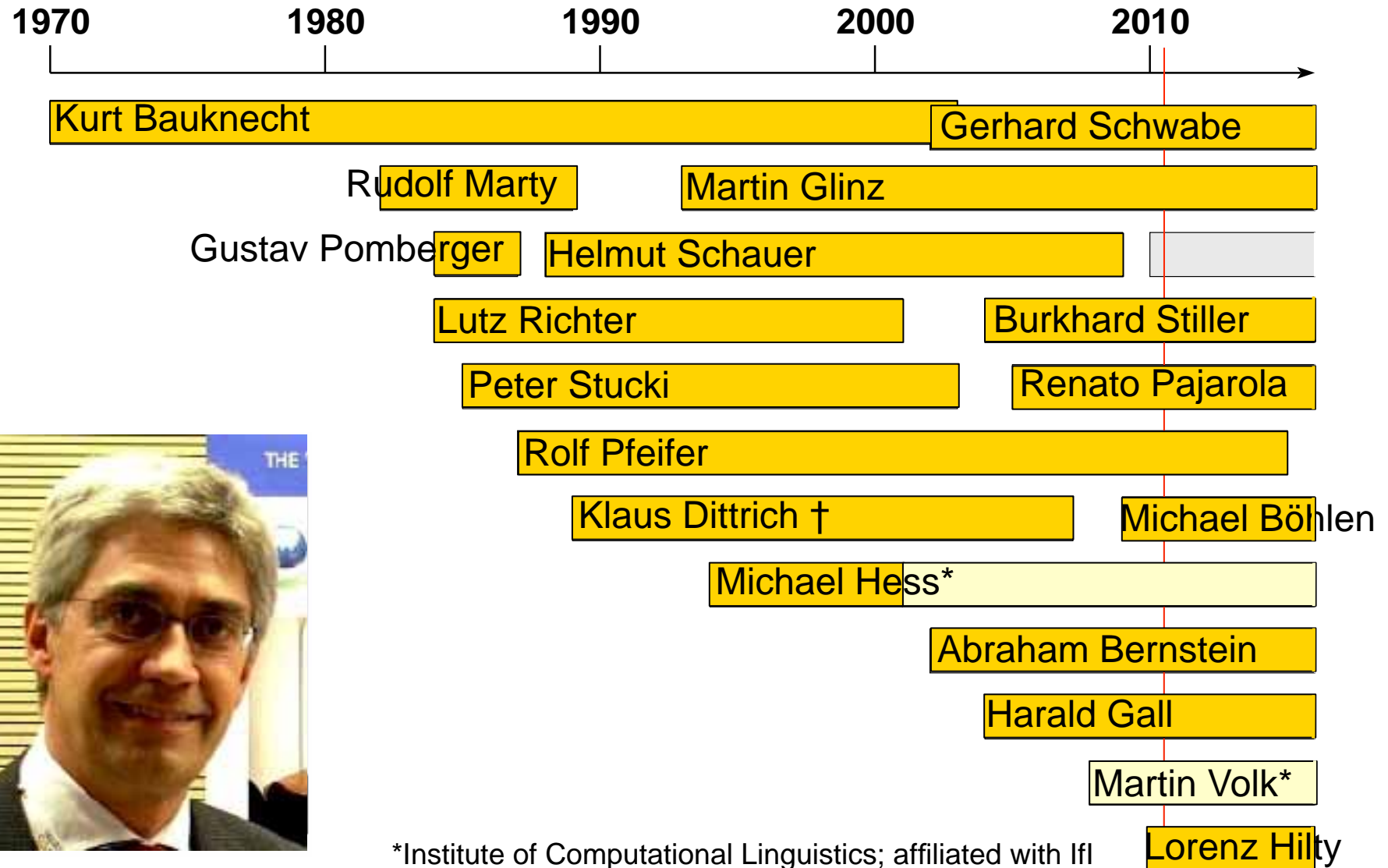
IfI grows: Timeline of tenured Professors



IfI grows: Timeline of tenured Professors

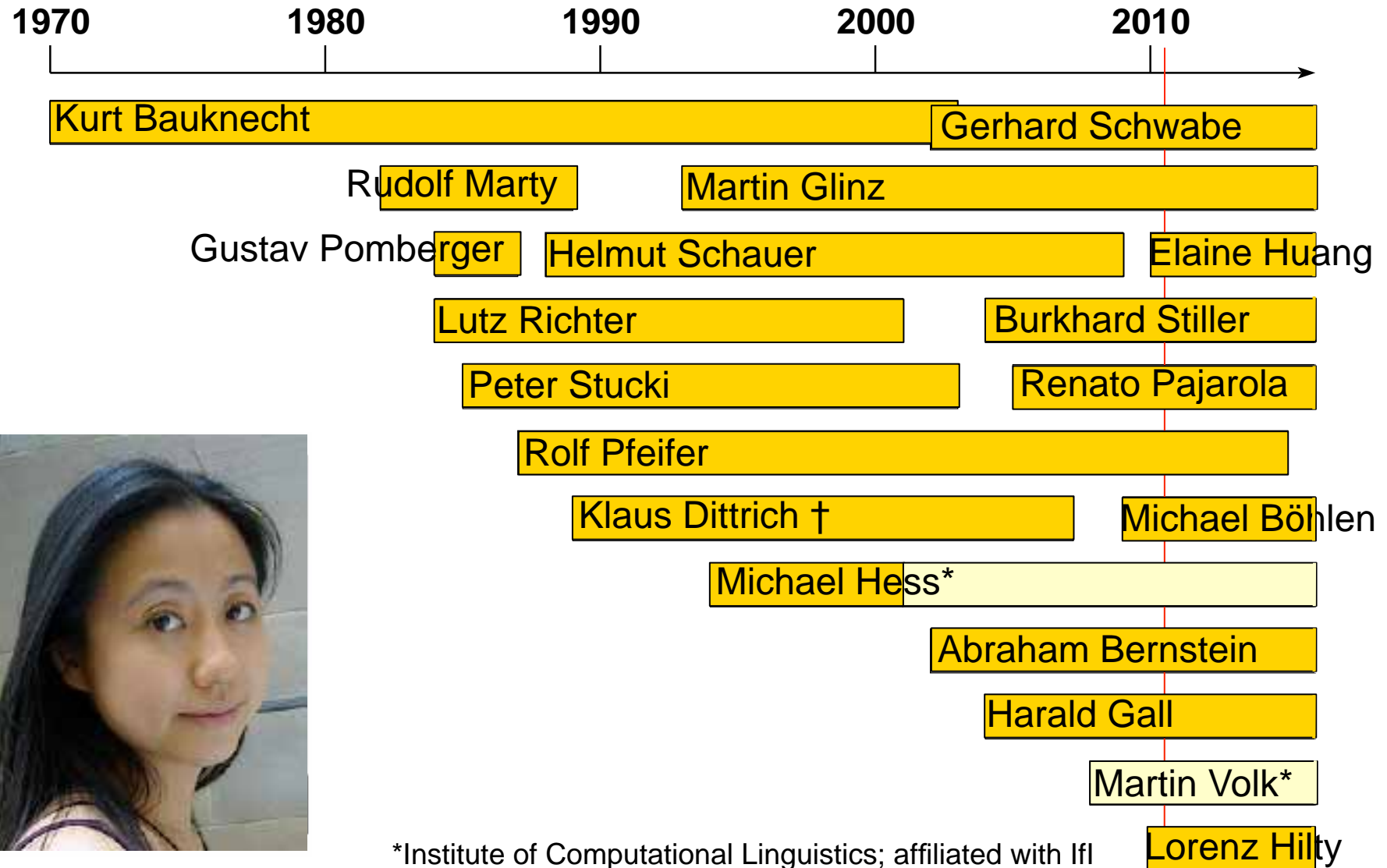


IfI grows: Timeline of tenured Professors



*Institute of Computational Linguistics; affiliated with IfI

IfI grows: Timeline of tenured Professors



*Institute of Computational Linguistics; affiliated with IfI

At the forefront of innovation

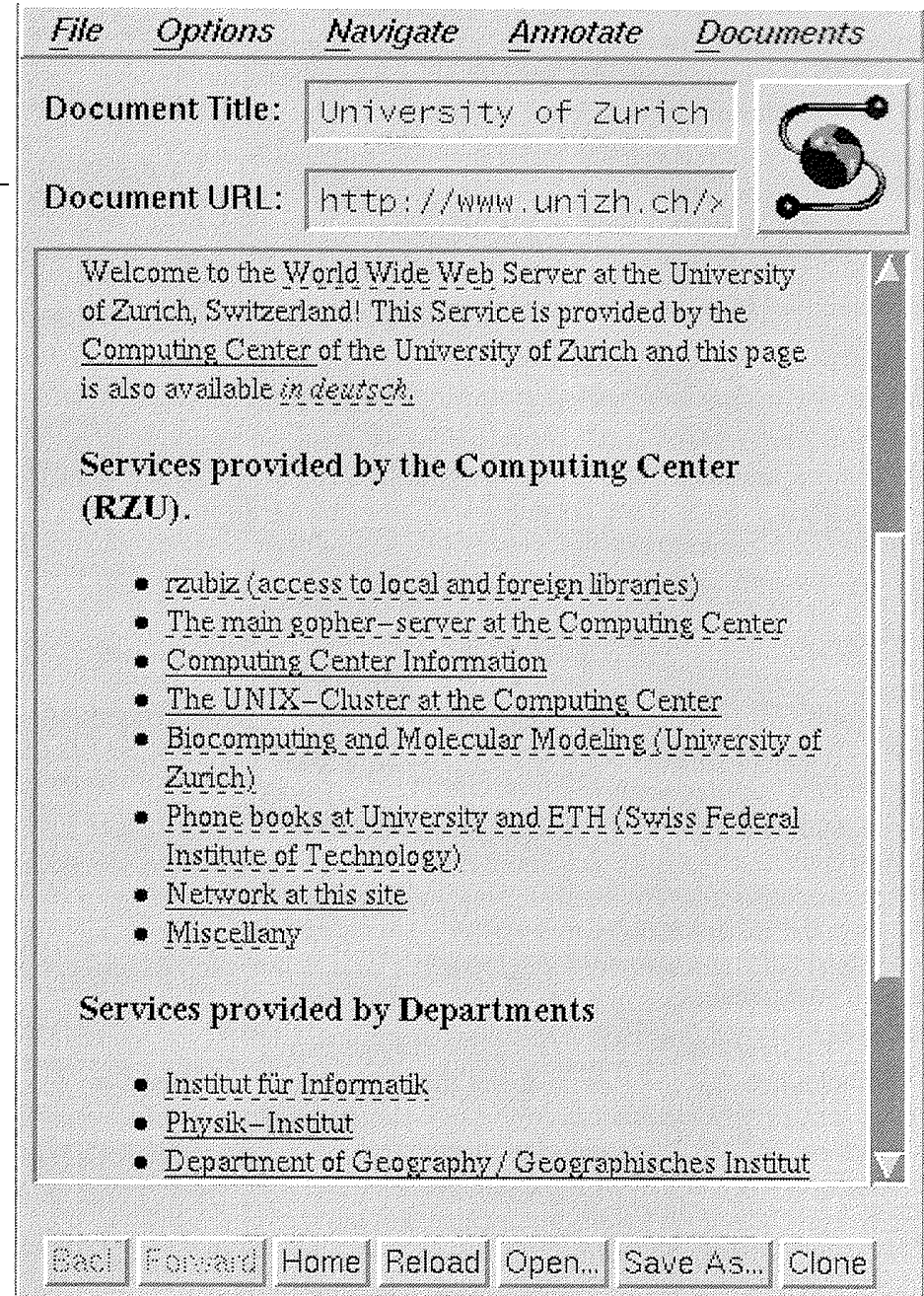
Events worth remembering

On the Web since 1993

The first Web server at UZH

Operated by the Computing Center

Then a part of IfI



IfI's first official homepage in 1994



Institut für Informatik - WWW / Mosaic-Eingangsseite

Am Institut für Informatik der Universität [Zürich](#) bestehen verschiedene netzwerkbasierte Informationssysteme. Es wird ein "Anonymous FTP"-Server betrieben, ein Gopher-Server dient als Institutsinformationssystem, einige WAIS-Clients, und wie hiermit festgelegt werden kann, WWW "world-wide web". Mit diesem Werkzeug haben Sie Zugriff auf alle diese Dienste.

Bitte wählen Sie zwischen:

- [Institut für Informatik \(Gopher\)](#)
- [List of WWW Servers in the World](#)
- [NCSA Mosaic-Eingangsseite](#)
- [Anonymous FTP archive of the Ifi \(DCS of UofZurich\) on claudie](#)
- [HOWTO-Seiten auf den UNIX-Systemen des Ifi](#)
- [Usenet-Newsgruppen speziell für's Ifi](#)
- [WWW am Rechenzentrum der Universität Zürich](#)
- [Der WAIS Server des Ifi's](#)

P.S.: Es gibt bereits eine experimentelle HTML-Seite: [Ifi HTML-Experiment](#).

Für Fragen bezüglich dieses neuen Mediums bitte bei RH (gopher@ifi.unizh.ch) melden ! Anregungen und Beiträge sind gerne willkommen !

A few months later, research groups follow



Department of Computer Science, University of Zurich

Hier ist die [deutsche Version](#) dieser Seite.

On the Department of Computer Science at the University of [Zurich](#) various information services are provided: an anonymous FTP server, Gopher serves as internal information source, some WAIS clients and WWW "world-wide web".

Please select:

- [Department of Computer Science \(Gopher\)](#)
 - [Anonymous FTP archive](#)
 - [WAIS server of the IFI](#)
-
- Workshop Announcement:
[Practice and Future of Autonomous Agents \(ASI-AA-95\)](#)
 - [Research Groups at the Department of Computer Science](#)
-
- [Computing Center of the University of Zurich \(RZU\)](#)
 - [List of WWW Servers in the World](#)

Please send suggestions to <gopher@ifi.unizh.ch>

1985: A quantum leap in teaching support

Ifl buys dozens of Macs



1985: A quantum leap in teaching support

Ifl buys dozens of Macs



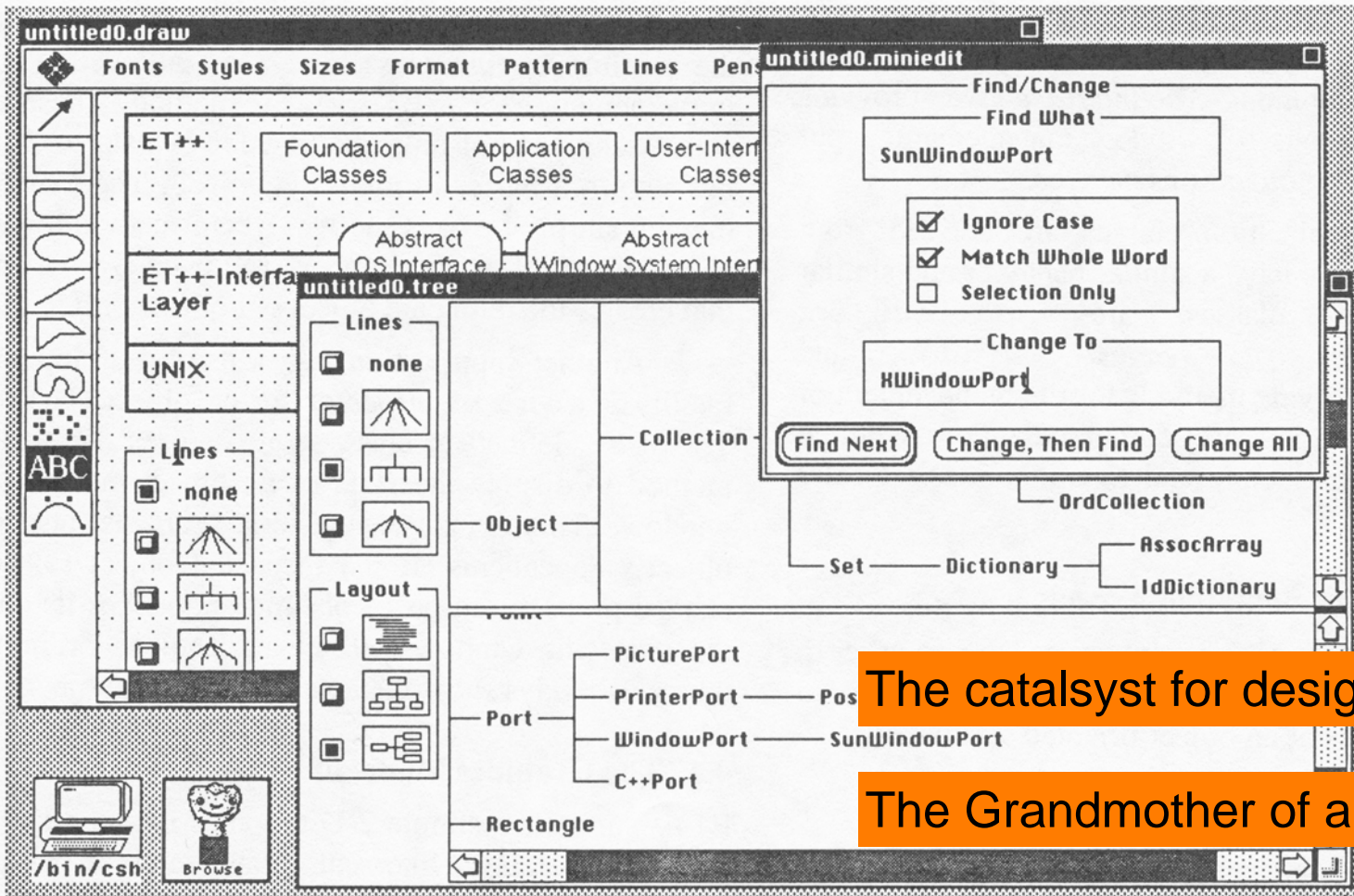
Service to the community

- Kurt Bauknecht was president of **IFIP**
- Klaus Dittrich was president of **SI**
- Ifl members are serving
 - on the **executive boards** of societies and special interest groups
 - in major **technical committees** and **steering committees**in our field

Some Research Highlights



Erich Gamma
Rudolf Marty
André Weinand

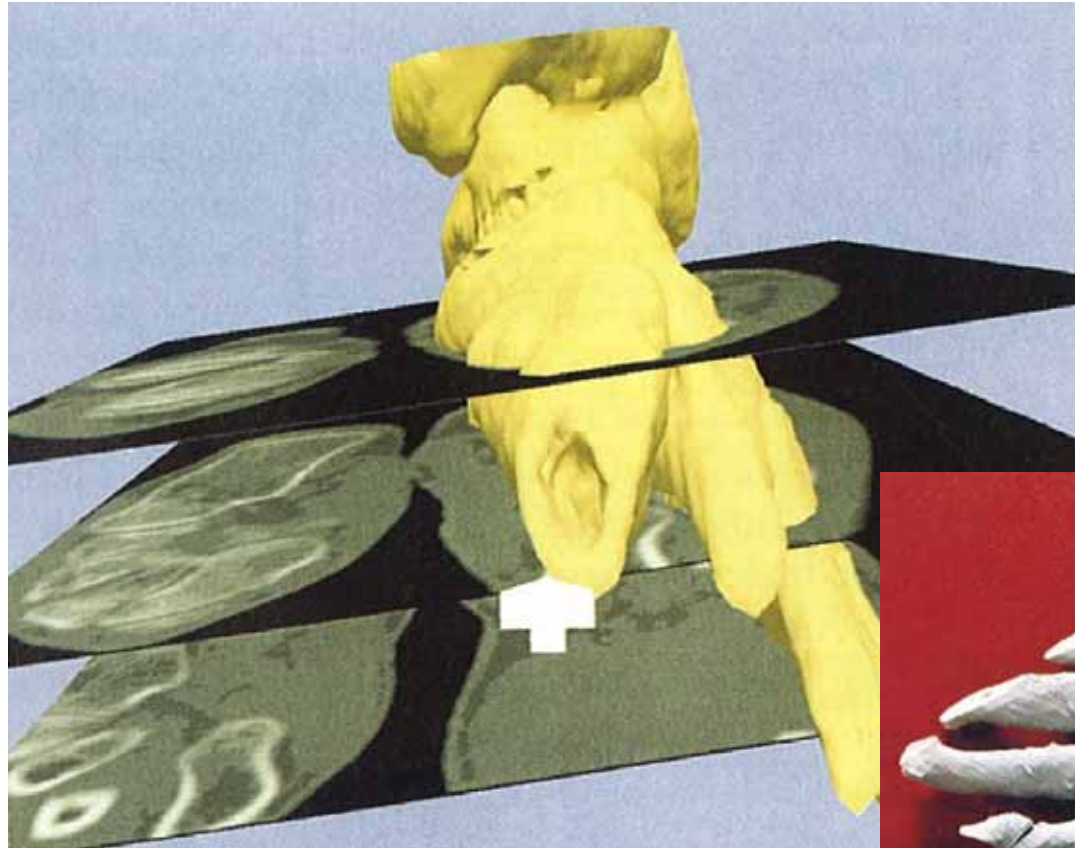


The catalyst for design patterns

The Grandmother of all frameworks

Figure 1: Some applications developed with ET++

3D Graphics and Reconstruction



Peter Stucki and
collaborators



Object-oriented Databases

The Object-Oriented Database System Manifesto

Malcolm Atkinson
University of Glasgow

David DeWitt
University of Wisconsin

David Maier
Oregon Graduate Center

François Bancilhon
Altair

Klaus Dittrich
University of Zurich

Stanley Zdonik
Brown University

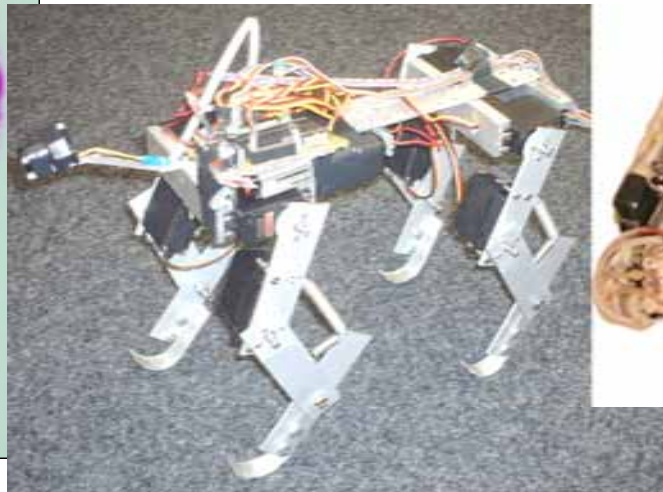
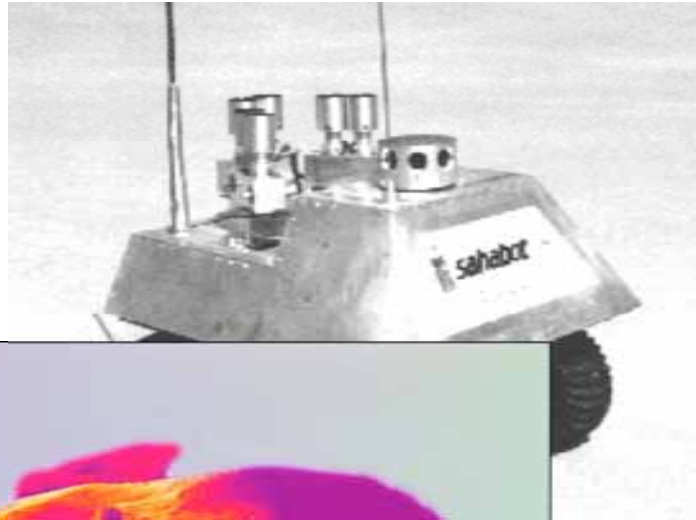
Abstract

This paper attempts to define an *object-oriented database system*. It describes the main features and characteristics that a system must have to qualify as an object-oriented database system.

We have separated these characteristics into three groups:

- *Mandatory*, the ones the system must satisfy in order to be termed an object-oriented database system. These are complex objects, object identity, encapsulation, types or classes, inheritance, overriding combined with late binding, extensi-

Embodied AI



Mining knowledge from large data sets

research highlights

P. 84

**Technical
Perspective
Maintaining
Quality in the Face
of Distributed
Development**

By James Herbsleb

P. 85

**Does Distributed Development
Affect Software Quality?
An Empirical Case Study
of Windows Vista**

By Christian Bird, Nachiappan Nagappan, Premkumar Devenbu,
Harald Gall, and Brendan Murphy

Communications of the ACM 52(8), 2009

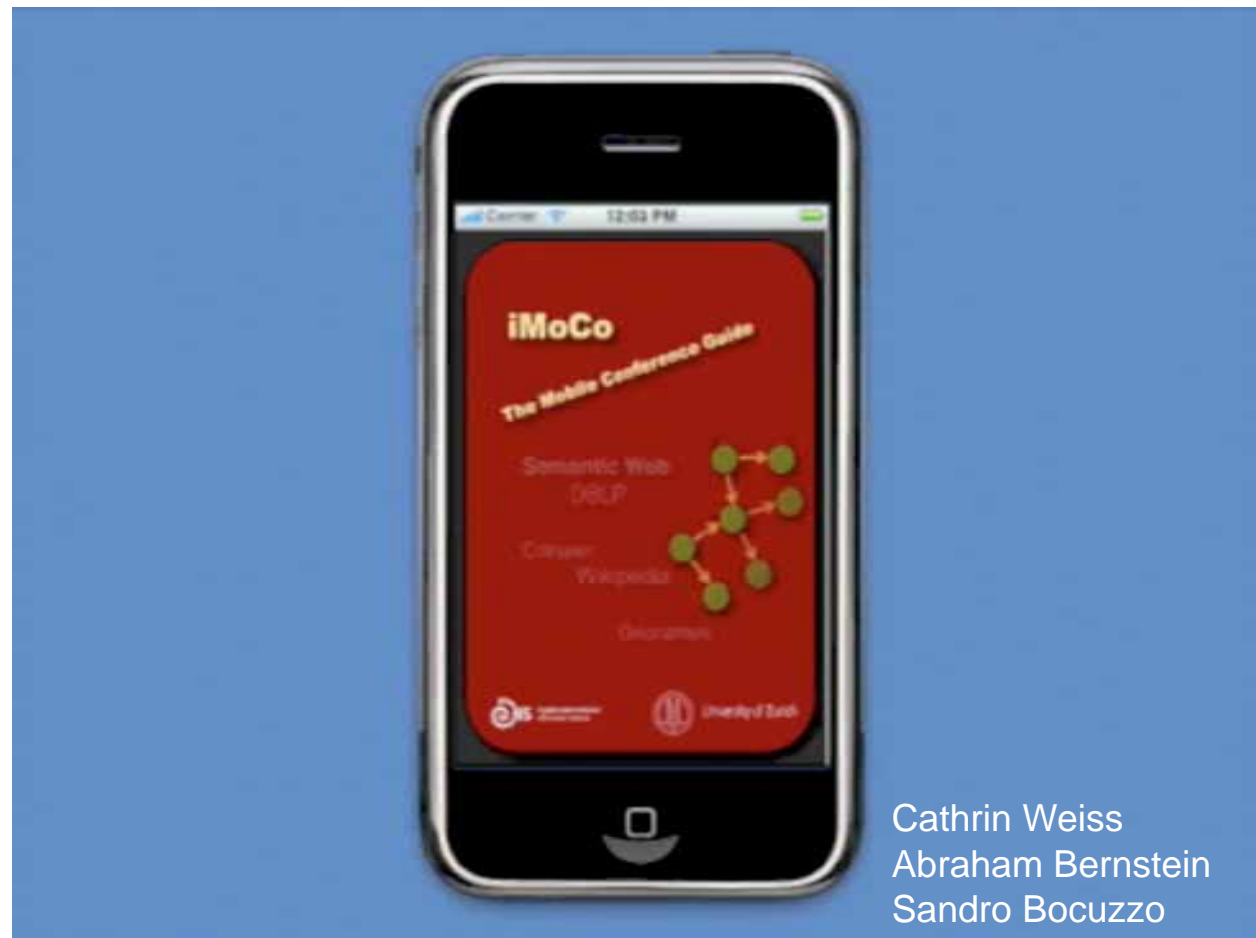
Querying very large data sets on an iPhone

9 GB raw data

~250 million triples

Real-time querying

8 GB iPhone



Innovative Collaboration: Software & Finance



IfI today: People

- 10 Tenured professors
- 5 Adjunct professors
- ~30 Part-time lecturers
- 17 Senior research associates / Postdocs
- 76 Assistants / PhD students
- 12 Technical and administrative staff

Home » IfI » People

ifi Directorate

| Phone | Name | First Name |
|---|-----------------------|---------------|
| 545 70* | Glinz | Martin, Prof. |
| For appointments contact Evelyne Berger | | |
| Tel: +41 44 63 54355 | | |
| Fax: +41 44 63 56809 | | |

Professors

| Name | First Name | Office | Phone |
|---------------------------|------------|--------------------------------|-------|
| Böhner | Michael | dbtg 2.E.13 | +41 4 |
| Bernstein | Abraham | ddis 2.D.06 | +41 4 |
| Gott | Harald C. | s.e.a.l 2.D.02 | +41 4 |
| Glinz | Martin | rerg 2.B.21 | +41 4 |
| Hess | Michael | rl 2.B.02 | +41 4 |

IfI today: Funding

We gratefully acknowledge the continued **funding support** by **UZH**

But we also maintain a significant amount of **self funding**:

> **20 M CHF** over the past six years

> **75 %** of third party funding granted on **competitive proposals**



Ifl today: Research

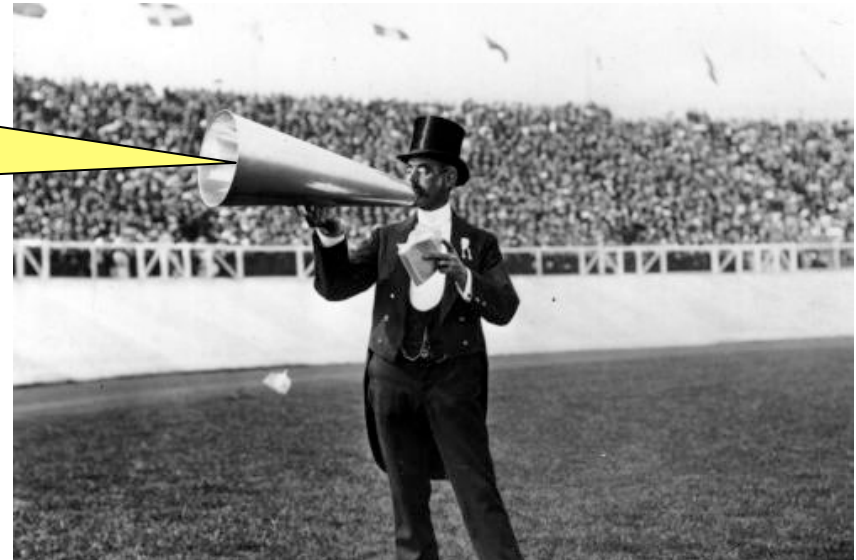
Top tier publications

Best paper awards and dissertation awards

Key roles in major international conferences

On editorial boards / editor-in-chief of top tier international journals

Exciting things
are happening
at Ifl!



The Road Ahead

Probably not a straight road



The Road Ahead

Increase the number of **assistant professors**



**University of
Zurich**^{UZH}

Faculty of Economics, Business Administration and IT

The Department of Informatics at the University of Zurich
seeks applications for four

Assistant Professor positions

in

Information Systems

Software Quality

Cognitive Systems and Artificial Intelligence

Human-Oriented Robotics

subject to
approval

The Road Ahead

Increase the number of **assistant professors**

Further develop **research excellence**

Many decision points ahead



The Road Ahead

Increase the number of **assistant professors**

Further develop **research excellence**

Increase **number of graduates** on all levels

Hopefully a not too bumpy road...



The Road Ahead

Increase the number of **assistant professors**

Further develop **research excellence**

Increase **number of graduates** on all levels

Advance Ifl and sustain it as a player in the **league of leading informatics departments**

And one that leads to the top.

