

Systeme digital, de l'algorithme au circuit

Bienvenue au cours

M.M.F.A.I.

Mercredi de 14h à 17h

Prendre un poly !

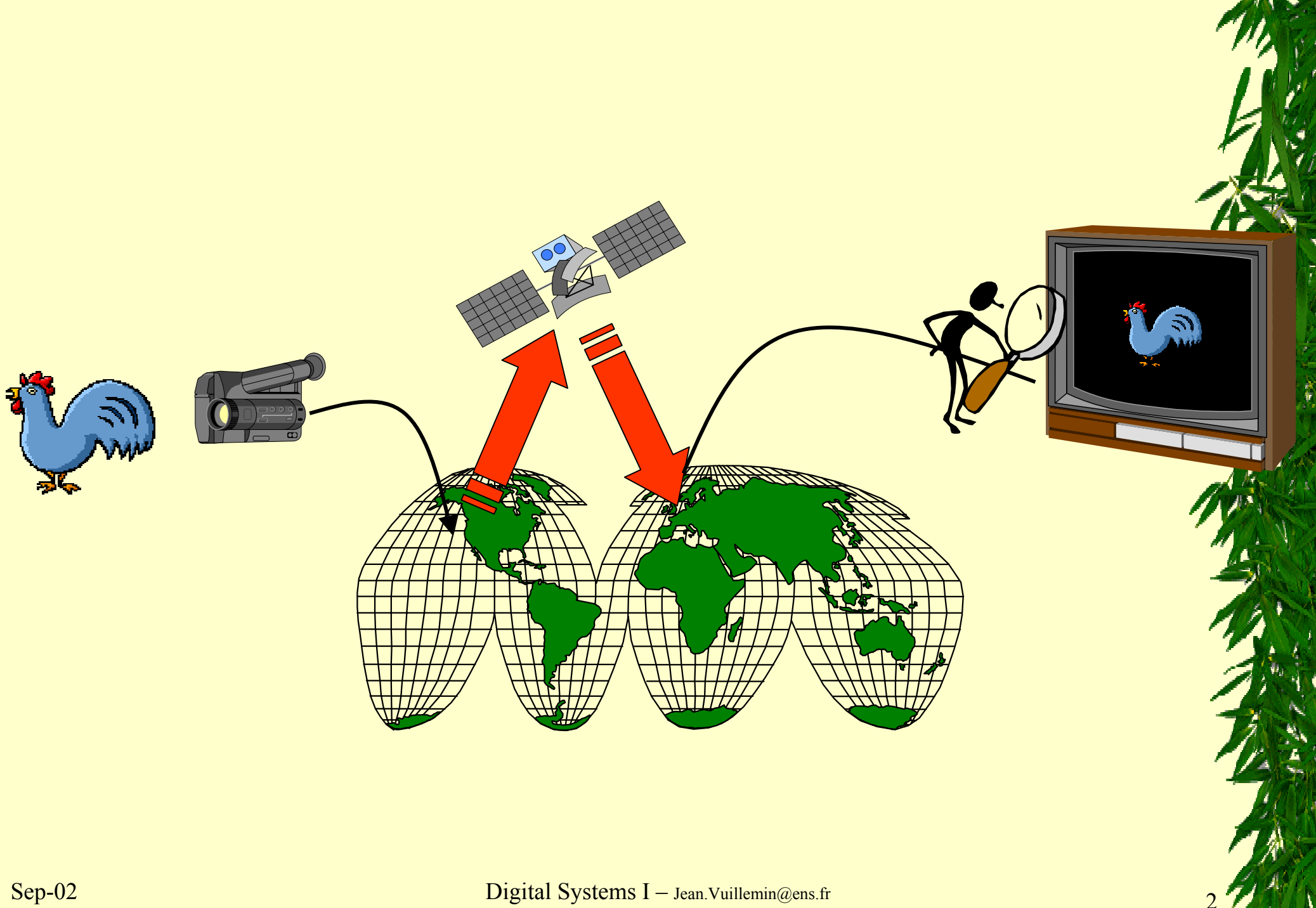
Envoyer un *email* pour s'inscrire:

Jean.Vuillemin@ens.fr

Cours en ligne

<http://www.di.ens.fr/~jv/HomePage/teaching.html>





Plan

Digital Synchronous Circuit

- Memory-less Circuit
- Sequential Circuit
- Digital Watch

Digital Algebra

- Digital Number
- Boolean Algebra + Shift
- Binary Rings

Electronic Circuit

- Transistors
- Silicon Process
- MOS Structures

Binary Arithmetic

- Counters
- Adders
- Multipliers

Universal Machine

- Microprocessor
- Programmable Logic
- Computable Functions

Digital Physics

- CCD Camera
- Radiation Detector
- Heat Equation

Information Theory

- Shannon's Theory
- Entropy Coding
- Error Coding

Audio & Video

- Digital Audio
- JPEG Compression
- Half Toning



Synchronous Module

Communication

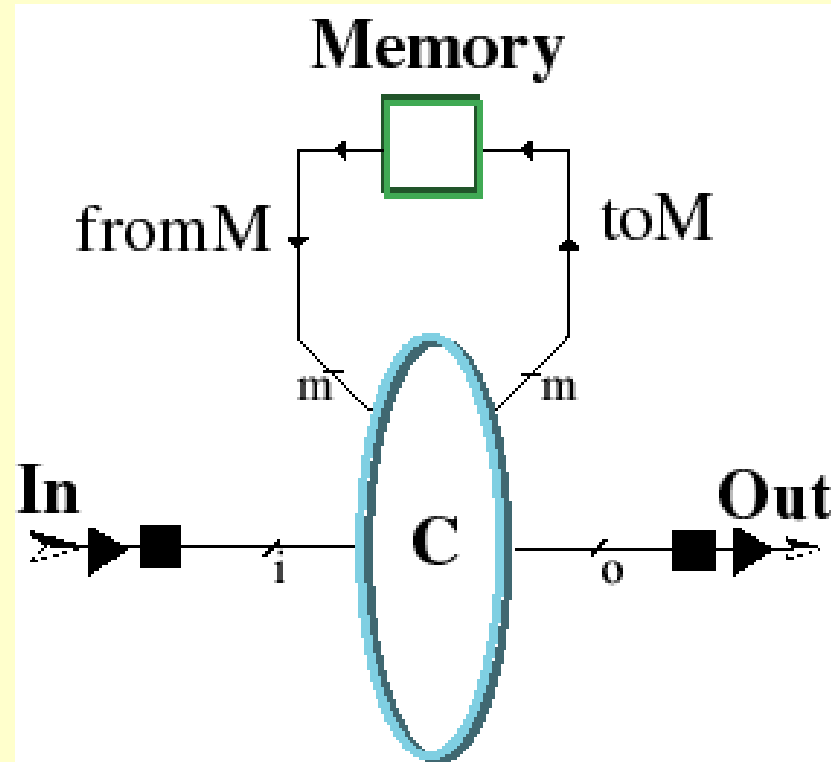
Processing

Memory

Hierarchy

Discrete Values: Binary

Discrete Time: Synchronous



Digital Synchronous Circuit

Form

Function

O

Digital watch

Numerations

