### Intégration de statistiques en temps réel

Real time statistics on live stream

par

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### Abstract

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## $Dedication\ and\ acknowledgements$

ere goes the dedication.

## Author's declaration

	declare that the work in this dissertation was carried out in accordance with the
re	equirements of the University's Regulations and Code of Practice for Research
⊥ D	Degree Programmes and that it has not been submitted for any other academic
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candid	date's own work. Work done in collaboration with, or with the assistance of,
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### 1 Introduction

Begins a chapter. Example: When the beloved cellist (Christopher Walken - outstanding) of a world-renowned string quartet receives a life-changing diagnosis, the group's future suddenly hangs in the balance: suppressed emotions, competing egos and uncontrollable passions threaten to derail years of friendship and collaboration. Featuring a brilliant ensemble cast (including Philip Seymour Hoffman, Catherine Keener and Mark Ivanir as the three other quartet members), it is a fascinating look into the world of working musicians, and an elegant homage to chamber music and the cultural world of New York. The music, of course, is ravishing (the score is the work of regular David Lynch collaborator Angelo Badalamenti): A Late Quartet hits all the right notes.

#### 1.1 Section

Begins a section.

#### 1.1.1 Subsection

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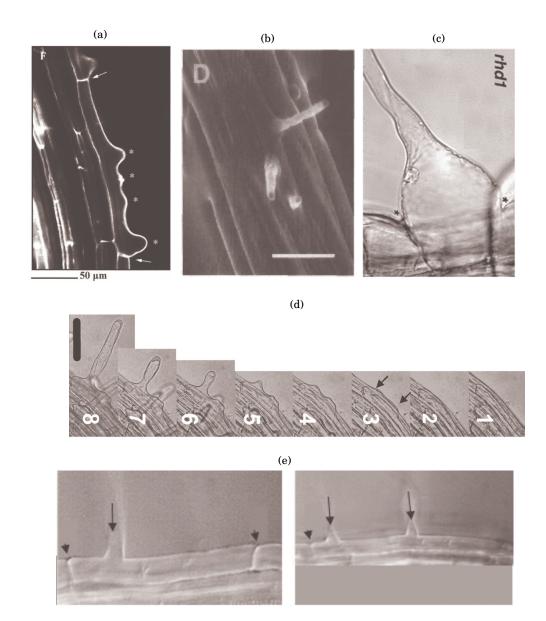


FIGURE 1.1. (a) A mutant RH cell. Asterisks show multiple sites of RH initiation in a single root hair cell (indicated by the arrows). Figure reproduced from [5]. (b) Hairforming cell with three RH initiation locations. The bar represents  $50\mu m$ . Figure reproduced from [3]. (c) Large bump in mutant rhd1. Figure reproduced from [?]. (d) Mutant overexpressing gene ROP2; from right-hand to left-hand, numbers indicate progressive snapshots at different times. RH initiation sites are indicated by the arrows. The bar represents  $75\mu m$ . Figure reproduced from [2]. (e) Mutants affected by auxin. On the left-hand side, RH site is farther away from the apical end (left arrow cap); on the right-hand side, multiple RH locations (arrows). Figure reproduced from [4].

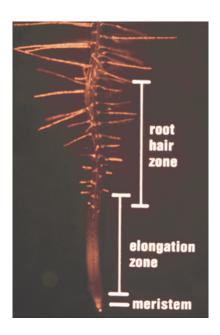


FIGURE 1.2. Developmental zones of an Arabidopsis root. Figure reproduced from [?].

### 2 HBBTV

ybrid Broadcast Broadband TV, plus connu sous l'acronyme HbbTV est un standard permettant le partage d'information et de services en complément a un flux multimédias destinés a l'utilisateur final.

Il fait partie des outils ou protocols TV OTT, acronyme signifiant télévision Over The Top ou services par contournement en français et qui définissent les contenus ne passant pas par le bouquet proposé par l'opérateur internet / télévision. C'est donc l'antithèse de la télévision linéaire, mode de consommation traditionnel. [1]

#### 2.1 Fonctionnement général

#### 2.2 Environnement de développement

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#### 2.2.1 Emulateurs

Begins a subsection.

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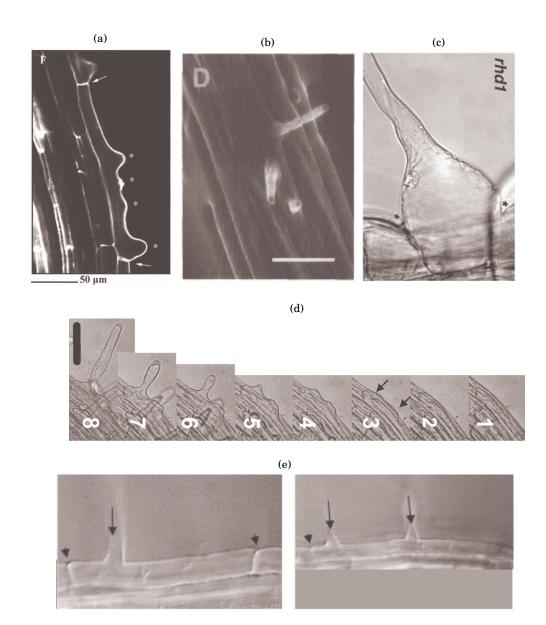


FIGURE 2.1. (a) A mutant RH cell. Asterisks show multiple sites of RH initiation in a single root hair cell (indicated by the arrows). Figure reproduced from [5]. (b) Hairforming cell with three RH initiation locations. The bar represents  $50\mu m$ . Figure reproduced from [3]. (c) Large bump in mutant rhd1. Figure reproduced from [?]. (d) Mutant overexpressing gene ROP2; from right-hand to left-hand, numbers indicate progressive snapshots at different times. RH initiation sites are indicated by the arrows. The bar represents  $75\mu m$ . Figure reproduced from [2]. (e) Mutants affected by auxin. On the left-hand side, RH site is farther away from the apical end (left arrow cap); on the right-hand side, multiple RH locations (arrows). Figure reproduced from [4].

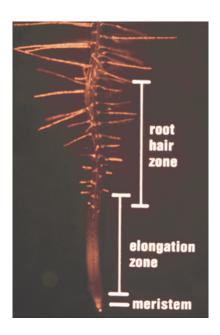


FIGURE 2.2. Developmental zones of an Arabidopsis root. Figure reproduced from [?].

## $A \quad Appendix A$

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