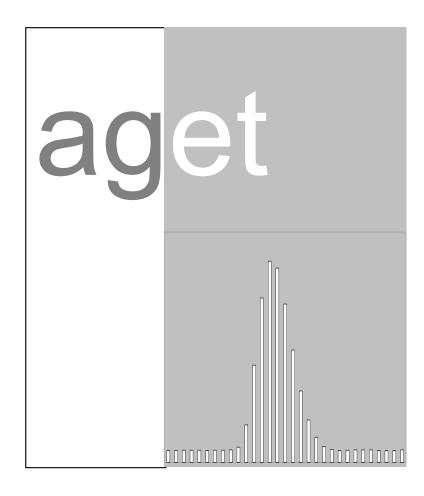


# AGET, a Front End ASIC for Active Time Projection Chamber

### Control of the individual Trigger signals

proposal 1.0, March 25, 2009; Author: P. Baron





## **Revision history**

| Date      | Revision | Changes  |  |
|-----------|----------|--|--|
| 25-Mar-09 | 1.0      | Creation/additional feature of the Aget requirements |  |



### Contents

| 1. | Introduction               | 4 |
|----|----------------------------|---|
| 2. | Description of the problem | 4 |
| 3. | Solution of the problem    | 4 |

#### 1. Introduction

This document contains the modification or more exactly an additional feature needed for the management of the trigger signal at the channel level.

#### 2. Description of the problem

In the case where one or several channels are statistically often hit by the effect of the beam for example, it is important that these channels do not participate to the trigger signal by keeping the possibility to know if they have been hit or not.

### 3. Solution of the problem

The "problem" can be solved by using the slow control to enable or not the individual trigger to the multiplicity signal building (fig. 1). This feature implies therefore an individual bit register of slow control per channel. The discriminator output remains always functional and can be memorized in the hit channel register.

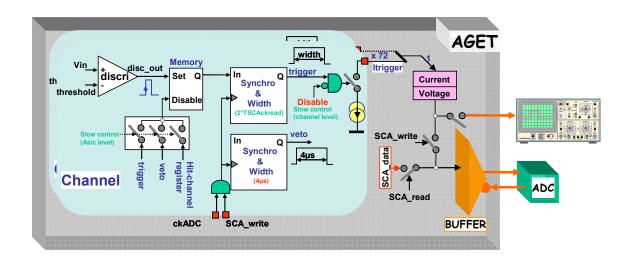


Fig 1: Schematic of the trigger signal management.