## vTinTin in the Land of the Gran Cazzo

# en hommage à Hergé

Dec. 9<sup>th</sup>, 2011

vTinTin: Peter

Snusy: Michelangelo

Captain HIGGSdock: Julien **Prof. KingsCollRus:** John **Elena OPERAfiasco:** Elena Thompsdaughter: Jeanne Thomsdaughter: Michelle Spring/Techni: **Ahmad** ExtraD: Sandip Ennio **TH3: TH4:** Gino

Blacky: Christophe

Fabulous Fabiola: Nanie
CanMS: Can
NAZILHCb: Nazila
AndreaLICE: Andrea

[TinTin film music.]

[Thompsdaughter and Thomsdaughter carry on sign saying ...]

#### The End

[Applause. Music stops.]

**KingsCollRus:** What's that? Wrong reference frame again! The End is supposed to come after the play, not before it! [Reverses sign, shows **The Beginning**. Ejects **TD1** and **TD2**, who return with new sign ...]

[Madonna 'Quicker than the speed of light' music.] [Cast sings 'Quicker than the speed of light'.]

### Scene 4: vTinTin and the Mystery of the Missing Higgs

[Music stops.]

vTinTin: Come on Snusy!

Snusy: Woof! Woof!

**vTinTin**: Our editor wants to know why CERN has not found the Higgs boson and has wasted billions of Swiss Francs ...

Snusy: Woof? Woof?

vTinTin: ... that means tens of billions of Euros ...

Snusy: Woof?? Woof??

**vTinTin**: ... that means trillions of new Greek drachmas introduced by our new dictator Ignatio-pandreou.

[AndreALICE displays photoshop of Ignatios/Papandreou.]

**Spring:** In our Arab countries we are also getting rid of all our dictators.

**vTinTin**: Not at CERN! [AndreALICE displays photoshop of and Merkel/Heuer. Snusy takes a dump.] Stop that, Snusy! Show our glorious leaders the respect they deserve. [Snusy takes a leak.] Who do you think you are, Gerard Depardieu? Anyway [indicates the audience] this is not an airplane.

**Thomsdaughter & Thompsdaughter:** We can help you! [Snusy takes aim, but is shooed away.]

**vTinTin**: How could you help?

**Thomsdaughter:** We have lots of suspicious characters in the Theory Division ...

**Thompsdaughter:** ... who, to be precise, have been looking for years for ways to hide the Higgs boson.

**vTinTin**: OK, let us interview them, and hear where they think the Higgs boson might have been hidden. What do you have to suggest?

**Techni:** There is no Higgs boson: I have replaced it by a bound state of techniquarks.

Snusy: Bark! Bark!

vTinTin: No, Snusy, he said techniQUARKS, not techniBARKS.

**Thomsdaughter:** That does not sound likely.

**Thompsdaughter**: To be precise: what do you do about the electroweak data? [*Snusy eats some.*]

**vTinTin**: Let us ask the next theorist. What do you have to suggest?

**ExtraD:** There is no Higgs boson: I have replaced it by boundary conditions in a curled-up extra dimension. [*Snusy chases his tail.*]

**Thompsdaughter:** That sounds even less likely!

**Thompsdaughter:** To be precise: how do you stabilize the fifth dimension?

**vTinTin**: Let us ask the next theorist. What do you have to suggest?

[Loud noise]

**TH3:** Sorry, I cannot hear you, with all this building work along the corridor there is so much racket in my office I cannot even hear myself think ... [Snusy puts his paws over his ears.] ...

TH4: ... and I am freezing without the heating. [Snusy shivers.]

**Blacky:** [Very insistently, waving chalk] Let me just explain to you on the blackboard ...

**vTinTin**: I do not see a blackboard anywhere, how about you **Snusy**? [Snusy shakes his head and yowls piteously.]

**Thomsdaughter:** [with magnifying glass] I cannot see a blackboard here ...

**Thompsdaughter:** [with magnifying glass] ... To be precise, the blackboard has disappeared from the Main Auditorium!

[**Blacky** writes on his own blackboard.]

[Snusy scrabbles at the ground.]

vTinTin: What have you found, Snusy? A bone? [Snusy shakes his head.] A blackboard? [Snusy shakes his head and yowls piteously.] Supersymmetry? [Snusy shakes his head.] A Higgs boson? [Snusy wags his tail.] Where? [Snusy digs deeper.] 100 metres underground!

[Fabiola piano music]

#### Scene 3: The secret of the Higgsicorn

[Music stops.]

[Snusy jumps up and down very enthusiastically, all over CanMS and FF.]

**vTinTin**: Snusy thinks you have evidence for the Higgs boson?

**CanMS**: We do not have any evidence for the Higgs boson ...

**FF**: We have two bumps ...

**vTinTin**: ... but they are rather small ....

vTinTin: So what do you have?

**CanMS**: [Pointing to plot] Well, it might weigh over 500 GeV ...

**Higgsdock**: \*\*\*\$\$\$###!!! That is not possible: it disagrees with the precision electroweak data.

**ATLAS**: ... but if the Higgs mass is lower, its production must be lower than in the Standard Model.

**Higgsdock**: \*\*\*\$\$\$###!!! Don't you dare suppress my couplings. The person who needs his couplings suppressed is Dominique Strauss-Kahn.

**vTinTin**: So maybe there is no Higgs boson at all?

**Higgsdock**: \*\*\*\$\$\$###!!! That is not possible, either: it also disagrees with the precision electroweak data.

**vTinTin**: So where can the Higgs boson be hidden?

[Snusy sniffs at the low-mass region of the plot.]

**Higgsdock**: \*\*\*\$\$\$###!!! This is exactly where it is predicted by the precision electroweak data.

**vTinTin**: This signal does not look very convincing to me. In fact, it looks like it has two peaks, or maybe 3 ...

**FF**: Well, if you combine our data ...

**CANMS**: ... it really begins to look like a Higgs signal.

**Higgsdock**: \*\*\*\$\$\$###!!! Where is the press release? We should announce the Higgs discovery straight away.

**KingsCollRus:** Did somebody mention the Englert-Brout boson? I am getting a bit worried about the stability of the vacuum ... [Snusy puts his paws over his head and tries to hide.]

ATLAS: Ladies, gentlemen, ...

CanMS: ... and members of the CERN Council ....

[There is a very loud farty sound. Everybody puts their hands and paws over their ears.]

**Higgsdock**: \*\*\*\$\$\$###!!! What is that terrible racket? Just as the Higgs was being discovered. Who is daring to cheat us out of our great day?

**ALICE**: We have shown that the quark-gluon plasma is almost a perfect liquid.

**vTinTin**: Just like Snusy's piss. [*Snusy lifts his leg and demonstrates.*]

**LHCb**: We have discovered CP violation in D decays.

**Higgsdock**: \*\*\*\$\$\$###!!! 'Ow charming! 'Ow beautiful!

LHCb: It must be physics beyond the Standard Model!

[Loud farty sound again. Cast puts their hands and paws over their ears.]

**Higgsdock**: \*\*\*\$\$\$###!!! What is that terrible racket? Just as the Higgs was being discovered. Who is daring to cheat us out of our great day?

[Alpenhorn serenade]

### Scene 2: OPERAfiasco and her Apenninenhorn

["Music" stops.]

**OPERAfiasco:** You see this? This is an Apenninenhorn. The Italian Minster paid for it. It goes all the way to the Gran Sasso laboratory.

**KingsCollRus:** What did you say? The Gran Sesso?

**OPERAfiasco:** No, the Gran SAsso!

**KingsCollRus:** What did you say? The Gran Cazzo?

**OPERAfiasco:** No, the Gran Sasso!

**KingsCollRus:** Ah yes, the Gran Cazzo! We could send neutrinos to the Gran Cazzo and see whether they really travel at the speed of light. [Cast groans 'boring' and goes away. Snusy lifts leg on Appenninenhorn.]

**Thompsdaughter** and **Thomsdaughter**: Or we can use it to eavesdrop on Burlesconi's bunga-bunga parties. [Cast gets very excited and gathers around. Snusy barks excitedly.]

**OPERAfiasco:** Or I can use it to give a concert in Italy. [*OPERAfiasco* starts to sing – her voice is out of key, *Cast* puts hands over years, *Snusy* yelps in pain.]

**vTinTin**: The notes do not sound quite right?

**Thomsdaughter**: They seem to be 2 parts in a hundred thousand too high!

**Thompsdaughter**: To be precise, 2.3! How did that happen?

**KingsCollRus:** I cannot be hearing right. [Gets out measuring tape.] According to the length of the Apenninenhorn, the pitch of her voice should be perfect. [Gets out stopwatch.] This is the explanation: OPERAfiasco's voice is reaching the other end 60 nanoseconds too quickly! Her voice is travelling faster than the speed of sound!

**HIGGSdock:** \*\*\*\$\$\$###!!! The lengths some people will go to cheat us out of our great day!

[Ride of the Valkyries music]

#### Scene 1: News from next week

[Music stops.]

**KingsCollRus:** If neutrinos can travel faster than sound, I mean light, I can get back from London before I go there.

**Higgsdock:** More importantly, if we transform to a suitable reference frame, we can receive messages from the future.

**vTinTin:** So we can get the news whether the discovery of the Higgs will be announced next week!

**KingsCollRus:** OK, let us all change reference frame!

[The entire Cast rotates, and OPERAfiasco blows on the Apenninenhorn from the opposite direction, vTinTin, HIGGSdock, Snusy and KingsCollRus listen.]

**KingsCollRus:** I do not think they will discover it. I am worried about those quadratic divergences.

**Snusy:** No need to worry about them: Bryan has proved that they do not exist.

[Cast cheers.]

[FF and CanMS drop Higgses into Apenninenhorn.]

**vTinTin**: [Listening] Yes! They will discover the Higgs next week!

HIGGSdock: \*\*\*\$\$\$###!!!

Thomsdaughter: At 145 GeV!

**HIGGSdock:** !#\*%^#!?? [Snusy barks excitedly.]

**KingsCollRus:** Did you say 45 GeV?

Thomsdaughter: No! At 145 GeV!

**KingsCollRus:** Why didn't you say that before? What a relief: our vacuum is

stable and the Standard Model works up to the Planck scale.

vTinTin: This is great news!

**Techni**: I must quickly write my next paper. It is a techni-pseudo-dilaton!

[FF and CanMS drop more Higgses into Apenninenhorn.]

**Thompsdaughter**: And at 135 GeV!

**HIGGSdock:** !#\*%^#!?? [Snusy barks excitedly.]

**KingsCollRus:** 531 GeV? The Standard Model will blow up!

Thompsdaughter: No! At 135 GeV!

**KingsCollRus:** Why didn't you say that before? That is OK: the theory is safe, our vacuum is still stable.

vTinTin: This is really great news: supersymmetry is dead!

**ExtraD**: It is a Kaluza-Klein excitation, I must quickly write another paper.

**Thomsdaughter:** And at 125 GeV!

**HIGGSdock:** !#\*%^#!?? [Snusy barks excitedly.]

KingsCollRus: 521 GeV? Another catastrophe! The Standard Model will blow

up!

Thomsdaughter: No! At 125 GeV!

KingsCollRus: Why didn't you say that before? This is bad news for the

Universe ...

vTinTin: This is even greater news: supersymmetry is vindicated!

**Black**: I must quickly write yet another paper.

Thompsdaughter: And at 119 GeV! [Snusy barks nervously.]

**HIGGSdock:** !#\*%^#!??

**vTinTin**: This is getting to be too much of a good thing.

KingsCollRus: 911 GeV? Another catastrophe! The Standard Model will blow

up again!

Thomsdaughter: No! At 119 GeV!

**KingsCollRus:** Why didn't you say that before? That is not so much of a good thing ... If the Higgs boson is as light as 119 GeV, our vacuum is unstable, and will decay in [gets out stopwatch] exactly 60 nanoseconds!

[Cast is drenched in shredded paper, apocalyptic music.]

The Beginning ... of the End

[The real one, this time.]

[Change music directly from apocalypse to 'O Sole Mio'.]

# Song: Neutrino mio

Che bella cosa faster than luce
Upsetting fisica in the Gran Cazzo!
While CERN prepares the Higgs fiesta
Che bella cosa faster than luce.
My Neutrino,
It's brighter still
Neutrino mio
It's in Higgs' face!
Neutrino, neutrino mio,
It's in Higgs' face!
It's in Higgs' face!

Maybe more data make the signal go away. It gives me almost melancholia; Below the light Higgs signal I'll stay Maybe more data make the signal go away. My neutrino, It's brighter still Neutrino mio It's in Higgs' face! Neutrino, neutrino mio It's in Higgs' face! It's in Higgs' face!