Phyphox and Arduino Tutorial	Download the Arduino IDE	Download and install the Arduino
Frédéric Bouquet Gautier Creutzer Physics Reimagined	ARDUINO 1.8.13 The open-source Arduino Software (IDE) makes it easy to write code and upload it to the board. It runs on Windows, Mac OS X, and Linux. The environment is written in Java and based on Processing and other open- source software.	IDE on <u>their</u> Website. App Requires Win 8.1 or 10 Download our program on <u>our</u>
Laboratory of Solid State Physics	This software can be used with any Arduino board. Refer to the Getting Started page for Installation instructions	s <u>SITE</u> .
Paris-Saclay University	Linux ARM C	Connect the board
October 2020	Release Notes Source Code Checksums (s	to one of your computer's USB ports.
	Sestionnaire de carte	×
 Extraire les dossiers compressés Sélectionner une destination et extraire les fichiers 	Type Tout winded [DEPRECATED - Please install standalone packages] Arduino Mbed OS Boards by Arduino Cartes incluses dans ce paquet: Online Help More Info	Go to Tools \rightarrow Board \rightarrow Boards Manager, then use the search
Les fichiers seront extraits dans ce dossier : nano_phyphox_v1 Parcourir Afficher les dossiers extraits une fois l'opération terminée	Arduino Mbed OS Nano Boards by Arduino version 2.0.0 INSTALLED Cartes incluses dans ce paquet: Arduino Nano 33 BLE, Arduino Nano 33 BLE Sense, Arduino Nano RP2040 Connect. Online Help More Info	bar to find and install the last version of Arduino Mbed OS Nano Boards by
Extract our program (Right click → Extract all) then launch « nano_phyphox_v1.ino ».	by Arduino Cartes incluses dans ce paquet: Arduino Portenta H7. <u>Online Help</u>	Arduino.

Phype Tout Sujet Tout Phyphox BLE by RWTH Aachen University Version 1.0.0 INSTALLED Use the app phyphox to visualize your sensor data on your phone or tablet! The purpose of this library is to use the open source phyphox app (see https://phyphox.org) to plot sensor data on your phone. phyphox is much more than only 'plotting your data'. You can also perform data analysis with it or access your phones sensors to use in your Arduino project. More info	Go to Tools → Manage Libraries, then use the search bar to find and instal the last versions of these 5 libraries:
Sélectionner une version V Installer	 phyphox BLE by RWTH Aachen University Arduino_LSM9DS1 by Arduino Arduino_LPS22HB by Arduino Arduino_HTS221 by Arduino Arduino_APDS9960 by Arduino
Ferm	Go to Tools \rightarrow Port and choose the port COMX to which an Arduino Nano 33 BLE is connected.

/				
			nano_phyphox_v1	Click on Upload (" \rightarrow "
;	<pre>#include <phyphoxble.h></phyphoxble.h></pre>		<pre>#include <phyphoxble.h> #include <arduino lsm9ds1.h=""></arduino></phyphoxble.h></pre>	icon under File and
1	<pre>#include <arduino_lsm9ds1.h> #include <arduino lps22hb.h=""></arduino></arduino_lsm9ds1.h></pre>		<pre>#include <arduino lps22hb.h=""> #include <arduino lps22hb.h=""></arduino></arduino></pre>	Edit).
3	<pre>#include <arduino_hts221.h> #include <arduino_hts221.h></arduino_hts221.h></arduino_hts221.h></pre>		<pre>#include <arduino_hts221.n> #include <arduino_apds9960.h></arduino_apds9960.h></arduino_hts221.n></pre>	
1	FINCING APDS9900.12		<pre>char board name[] = "Phyphox1"; // to change the name displayed by the board using BLE: no</pre>	Wait for the end of
(<pre>char board_name[] = "Phyphox1"; // to change the name disp float choice = 0.0;</pre>		<pre>float choice = 0.0;</pre>	the loading, which will
	float accx, accy, accz, acc;		float accx, accy, accz, acc; float gyrx, gyry, gyrz, gyr;	be indicated by "Done
			<pre>float magx, magy, magz, magn;</pre>	uploading" at the
	If needed, change the name displayed by		float pressure; float temperature, humidity;	bottom of the
	the board (mostly useful if there are		<pre>int red, green, blue, ambient; float ambient float;</pre>	v window.
	several boards in the same room).		<	
5		0	Téléversement terminé	

Download the phyphox app by RWTH Aachen on Google Play or App-Store.

Launch the phyphox app, click on "+" then "Add an experiment with a QR code". Flash the following QR code. (Alternatively, you can go to our site and click on "Phyphox experiments" under Tutorials and program.)

Ouverture d'une série d'expériences

Cette ressource contient plusieurs expériences. Vous pouvez en choisir une pour l'ouvrir et éventuellement l'enregistrer dans votre collection, ou utiliser le bouton ci-dessous pour les enregistrer toutes en même temps dans votre collection.

Arduino Nano 33 BLE Sense



8

Select Save all.

In the list of phyphox experiments, ours are now available under "Arduino Nano 33 BLE Sense".



To start using the experiments, power your board, and activate Bluetooth and GPS on your smartphone.

Launch phyphox and select an experiment under Arduino Nano 33 BLE Sense.

Choisissez un appareil. Recherche d'appareils Bluetooth... (Sense) Phyphox1 X acceleration (g **Bose AE2 SoundLink** BX0A49D4E2000B152E Si votre appareil n'est pas pris en charge, / acceleration (g< > cliquez sur "plus d'infos" pour en savoir plus sur la prise en charge par phyphox du Bluetooth à basse consommation (Bluetooth Low Energy, BLE) sur notre site ANNULER PLUS D'INFO Select the board to which the smartphone should connect (Phyphox1 here).

Web.

10



9