

---

# To run aliased\_RR

## Table of Contents

Credit and date .....	1
Intro .....	1
Repo location .....	1
Dependencies: .....	1
Basic usage .....	1

## Credit and date

Code developed by Oscar Miranda-Dominguez.

First line of documentation: November 11, 2019

## Intro

This function displays the aliased frequency in Hz of a signal in events per minute (RR\_bpm). YOu also need to provide the TR in seconds

## Repo location

[https://gitlab.com/Fair\\_lab/movement\\_regressors\\_power\\_plots](https://gitlab.com/Fair_lab/movement_regressors_power_plots)

## Dependencies:

NO extra dependencies needed

## Basic usage

if you like to calculate the aliases respiration rate of 12, 12.5,... 25 breaths per minute at a TR of 2.2. you need to do the following:

```
RR_bpm=12:3:25;% respiration rate (RR_bpm)in breaths per minute
TR=2.2; % TR in seconds
[T,RRa_Hz] = aliased_RR(RR_bpm,TR);
```

*Aliased frequencies at a TR of 2.2 seconds*

<i>Resp_rate_bpm</i>	<i>Resp_rate_Hz</i>	<i>Resp_rate_aliased_Hz</i>
<i>12.0</i>	<i>0.200</i>	<i>0.2000</i>
<i>15.0</i>	<i>0.250</i>	<i>0.2045</i>
<i>18.0</i>	<i>0.300</i>	<i>0.1545</i>
<i>21.0</i>	<i>0.350</i>	<i>0.1045</i>
<i>24.0</i>	<i>0.400</i>	<i>0.0545</i>

*Published with MATLAB® R2019a*