

Two component Dark Matter

with neutrino masses



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Sep 6, 2019 - Darkwin - Natal [PDF: <http://bit.ly/darkwin>]

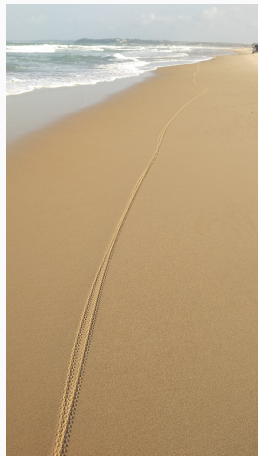
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Focus on

[arXiv:1811.11927](https://arxiv.org/abs/1811.11927) [PRD]

In collaboration with

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Preliminars

Parameter space

$$S = \frac{1}{\sqrt{2}} (v_1 + h_1) + \frac{i}{\sqrt{2}} A_1$$

$$S' = \frac{1}{\sqrt{2}} (v_2 + h_2) + \frac{i}{\sqrt{2}} A_2$$

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G', A

$$\begin{pmatrix} H_1 \\ H_2 \end{pmatrix} = \begin{pmatrix} \cos \theta & -\sin \theta \\ \sin \theta & \cos \theta \end{pmatrix} \begin{pmatrix} h_1 \\ h_2 \end{pmatrix}$$

$$\tan \beta = \frac{v_2}{v_1}$$

$$M_{Z'}^2 = g_{BL}^2 v_2^2 (4 + \tan^2 \beta)$$

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$$\tan \beta = \frac{v_2}{v_1}$$

$$M_{Z'}^2 = g_{BL}^2 v_2^2 (4 + \tan^2 \beta)$$

$$\mathcal{L} = M_1 \overline{\chi_1} \chi_1 + M_2 \overline{\chi_2} \chi_2 + M_{N1} \overline{N_{R1}^c} N_{R1} + M_{N2} \overline{N_{R2}^c} N_{R2}$$

Parameter space

$$S = \frac{1}{\sqrt{2}} (v_1 + h_1) + \frac{i}{\sqrt{2}} A_1$$

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$$\tan \beta = \frac{v_2}{v_1}$$

11 parameters

$$M_{Z'}^2 = g_{BL}^2 v_2^2 (4 + \tan^2 \beta)$$

$$m_\chi = M_1 \text{ or } M_2$$

$$\mathcal{L} = M_1 \bar{\chi}_1 \chi_1 + M_2 \bar{\chi}_2 \chi_2 + M_{N1} \bar{N}_{R1}^c N_{R1} + M_{N2} \bar{N}_{R2}^c N_{R2}$$