

Re: New Paper: Magnetic Monopoles and Duality Symmetry Breaking in Maxwell's Electrodynamics

Re: New Paper: Magnetic Monopoles and Duality Symmetry Breaking in Maxwell's Electrodynamics

Source: <http://sci.tech-archive.net/Archive/sci.physics.particle/2005-08/msg00083.html>

- *From:* "CF Diether" <fred@xxxxxxxxxxxxxxxxxxxxx>
 - *Date:* Sun, 28 Aug 2005 02:01:09 GMT
-

"Jay R. Yablon" <jyablon@xxxxxxxxxxxxx> wrote in message
[news:rU9Pe.36097\\$EX.5319@xxxxxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:news:rU9Pe.36097$EX.5319@xxxxxxxxxxxxxxxxxxxxxxxxxxxxx)

| Hello to all:

|

| I wanted to let you know about my new paper just posted at
<http://arxiv.org/abs/hep-ph/0508257>, titled Magnetic Monopoles and
Duality

| Symmetry Breaking in Maxwell's Electrodynamics.

|

| This paper summarizes the main direction of my research over these
past
| eight months.

|

| The abstract is as follows:

|

| It is shown how to break the symmetry of a Lagrangian with duality
symmetry
| between electric and magnetic monopoles, so that at low energy,
electric

| monopole interactions continue to be observed but magnetic monopole
| interactions become very highly suppressed to the point of effectively
| vanishing. The "zero-charge" problem of source-free electrodynamics is
| solved by requiring invariance under continuous, local, duality
| transformations, while local duality symmetry combined with local
U(1)_EM

| gauge symmetry leads naturally and surprisingly to an SU(2)_D duality
gauge
| group.

|

| I would be interested in any feedback, public or private, that you may
wish
| to provide.

|

| Sincerely,

|

| Jay R. Yablon

| _____

| Jay R. Yablon

Re: New Paper: Magnetic Monopoles and Duality Symmetry Breaking in Maxwell's Electrodynamics

Re: New Paper: Magnetic Monopoles and Duality Symmetry Breaking in Maxwell's Electrodynamics

| Email: jyablon@xxxxxxxxxxxxx

I would also like to point out that this paper predicts a super-heavy magnetic vector boson in the low 2 TeV range. Maybe something worth searching for at the new LHC.

FD

• **References:**

◆ ***New Paper: Magnetic Monopoles and Duality Symmetry Breaking in Maxwell's Electrodynamics***

◇ *From:* Jay R. Yablon

• Prev by Date: ***Re: Focused Beam Fusion***

• Next by Date: ***UNCERTAiNTY Principle REDUNDANT.!!***

• Previous by thread: ***New Paper: Magnetic Monopoles and Duality Symmetry Breaking in Maxwell's Electrodynamics***

• Next by thread: ***Anti-Proton Factories***

• Index(es):

◆ ***Date***

◆ ***Thread***