



ASTRA ALBA

AND

THE 6 (PLUS 1?) QUARKS

by

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ASTRA ALBA AND THE 6 (PLUS 1?) QUARKS

Characters in order of appearance

- Musicians of the Spheres** Black leotards, white net tunics with gold notes sewn over, gold 'halos'.
- Professor** Academic cap and gown.
- Schoolgirl** Carrying list of scientific items studied, in large print.
- Young Mother** Apron and slippers. In Epilogue, grey wig, wrinkles and carrying a walking stick.
- Sarah** Her daughter.
- General Relativity** Military uniform, medals etc.
- The Dark Queen of Anti-Matter** Black robes and crown with silver sparkles. 'Coverall' bright sparkling robe and head-dress for Scene four.
- Her Servant** Also in black and silver.
- Pulsars** Glittering costumes and head-dresses.
- Little Robot** Dalek like character. Underneath dressed as a Quark.
- Astra Alba** Dressed exactly like the Dark Queen, except in white and silver.
- Six Quarks – Top, Bottom, Up, Down, Strange and Charm** In two groups of three. Dressed entirely in red, blue or green and carrying the same coloured dusters.
- The Red Giant** With the White Dwarf, concealed under his long cloak. Giant's head held up on a long pole by hidden dwarf.
- Prince Comet** Sparkling, with detachable headband, holding 'hair' of bright ribbons, tinsel, stars etc.
- His servants** Similarly attired.
- Also required** Someone dressed entirely in black, to be inside the Black Hole, to pull people into it.

You are free to produce this play, but if you do, please send a note to the author, perhaps with some photographs of your production.



THE PROLOGUE (Can be adopted to suit any school)

(Enter Professor and schoolgirl)

Professor

Good evening, ladies and gentlemen. The Government have recently expressed concern about the quality and availability of good Science Teaching – especially for girls. As you are probably aware, at Withington Girls School in Manchester, we have always nurtured our girls' scientific interests and demand very high standards. However as a concession to the Government, Form 1 have decided that this year their play will demand of its cast – and audience!!! – a much more scientific background.

This has involved the Form in much scientific study, including no less weighty matters than Einstein's Theory of Relativity, Matter and Anti-Matter, Pulsars, Comets, Quarks, Blackholes, The Life Cycle of a Star, The Expanding Universe and so on.

These ideas have been combined with legend, romance, magic and music to produce our play. We hope that you will enjoy spotting our scientific allusions and that you will be encouraged, especially the ladies amongst you, to go back again to your books and rediscover the joys of trying to understand our Universe.

Most of the scientific ideas we mention are extremely well known but we feel that we might need to remind the less scientific amongst you, that Quarks are the smallest constituents of the nucleus of an Atom, and are named as in the play. So far, only six have been identified, but who knows? – Might there be seven? Also it is necessary to understand that in simple terms, if matter and anti-matter are combined, they disappear in a burst of energy.

And so we offer our very up-dated version of Snow White and the Seven Dwarfs – Astra Alba and the Six (Plus One?) Quarks.

(This speech can be divided between the two characters on the stage if necessary.)

(End of Scene)



Scene One – Garden of a house in Manchester

(Sarah and her mother sit reading. Small puppy with them)

- Mother** *(Reading)*... and so the wicked Queen was destroyed and Snow White and the Prince were married and lived happily ever after. There! Did you enjoy that?
- Sarah** Yes, I suppose so. But I wish the fairy stories were a bit more modern. It's not very scientific is it?
- Mother** Oh, you and your science! That's all your head is filled with! Anyway, I'll have to go in and get Daddy's tea now. Don't stay out here too long. It's nearly bedtime.
(Mother goes in)
- Sarah** Mummy certainly has some odd ideas about Science. I expect it's because at her school they thought it was only a fit subject for boys. And why shouldn't my head be filled with it? After all, science is just trying to understand how everything works. And surely that's important!
(Enter General Relativity)
- General R.** Well said, young lady! But I wish it wasn't taking the human race so long to understand.
- Sarah** *(Jumping up in surprise)* Good gracious! Who are you? And how did you get into the garden? And what do you want?
- General R.** One question at a time please. Allow me to introduce myself. *(He salutes)* My name is General Relativity and I am in charge of the Universe. I can travel backwards and forwards in what you call time and space and...
- Sarah** But... I thought General Relativity was a theory, not a person. Einstein said...
- General R.** Ah! Mr Einstein. Now he was very clever – for a human. And to him, I was just a theory – as I only communicated with him in his mind when helping him to understand.
- Sarah** I see. But why are you here?
- General R.** Well, to tell you the truth, sometimes I get awfully lonely just directing my forces and keeping everything in order. So occasionally, I come to Earth for a bit of companionship. I get so tired of waiting for man to catch me up in understanding. They make such slow progress and yet they think the glimpses they have of the truth are wonderful. Take that Greek in his bath tub – can't remember the fellow's name – but he made such an exhibition of himself, running through the town stark naked and shouting "Eureka" – and all because he'd noticed something that should have been obvious all the time.
- Sarah** Oh, Archimedes you mean. We learned about him in school.

General R. Then there was that Armstrong chap recently... stepping on the Moon and calling it a "giant leap for mankind" – when the moon is so close to the Earth compared with anywhere else, a midget could have done it.

Sarah Oh dear, I'd better change the subject, I think! He seems very angry with us... I see that life is difficult for you General. Do you have anyone to help you?

General R. No, I have a few specials who deal with insignificant matters – like throwing apples down from trees until someone realises that it's a bit odd that they always hit the ground.

Sarah Gravity! Well! But why did you come to me? I'm no Einstein or Newton.

General R. No, but you have a thirst for knowledge and that is all important. Anyway, as I told you, I was lonely – so I thought I'd come and take you into your future, to see how the fairy tales will be told then. Will you come? We must travel faster than light and...

Sarah But wait a minute. No one can travel faster than light!

General R. Except the one who keeps the laws of the Universe in order. Are you willing to try? We will go first to the Kingdom of Darkness where the wicked Queen of Anti-matter rules and where her beautiful step-daughter Astra Alba lives.

Sarah Oh, it's Snow White. Yes, I will come.

General R. Good. Then hold my hand and close your eyes and later we will sit and watch the story unfold.

(End of Scene)

Scene Two – In the Kingdom of Darkness

- Queen** (To Servant) Have the Pulsars arrived from Prince Comet?
- Servant** Yes, Your Majesty
- Queen** Then bring them in immediately, you dolt!
(*Servant leaves*)
I am determined to marry again, now that my husband is dead. And my choice is Prince Comet. I have only seen him once, when he came by in Royal orbit a few years ago, but he was so beautiful with his bright face and shining hair. I know that my stupid step-daughter thinks that she loves him too, but she has no planet to offer him. And anyway, no one could prefer *her* pale looks to my dark beauty.
- Servant** (*Entering with Pulsars*) The Pulsars from Prince Comet, Your Majesty.
- Queen** May the powers of the night protect you. You are welcome with your acceptance of my offer of my hand in marriage to your Prince.
- Pulsar** Sunlight and starshine be yours, your majesty. We do indeed bring a message from our Prince. It is this. "Tell the Queen," he said, "That it is destined that I shall marry the most beautiful woman in the world"
- Queen** As I said – you bring his acceptance. For none is more beautiful than I.
- Pulsar** I'm afraid, Your Majesty, that that is not so, and therefore Prince Comet cannot marry you.
- Queen** What! How dare you! You there... (*Signalling to little Robot who has been standing guard*) Exterminate them. They are false messengers. I shall send my request again.
(*Pulsars run out pursued by Robot*)
- Little Robot** Exter... Exter...
- Queen** What is the matter with you? They are escaping! Fool! I will deal with you later. At the moment I have other, more important, matters to deal with. Come!
(*Queen and Servant leave. Robot sits weeping. Enter Astra Alba*)
- Astra Alba** Why, whatever is the matter? It's one of the Queen's guards, isn't it? Why are you crying? I dare not touch you, but you can borrow my hanky if you like... (*He blows hard*) That's better. Now, tell me your troubles. At least my own misery in this dark and evil place, helps me to sympathise with others.
- Little Robot** Oh Princess! You were always kind. And in your father's day we were all happy. I was an ordinary servant then, and though we had to punish wrongdoers, usually a word was enough – or perhaps a spell in the dark. For darkness was hated then and everything was shining and beautiful. But since your stepmother came to power, all lovely things have gone. And we have been issued with weapons of anti-matter, which, if used, burn up her enemies. So all good things are disappearing.

Astra Alba I know. I weep for it myself. But what can we do?

Little Robot I do not know. I refused to use my weapon today against the Pulsars who came from Prince Comet.

Astra Alba (*Eagerly*)... Oh yes – the messengers! What did they say?

Little Robot He refused the Queen.

Astra Alba Refused! My Prince! At least there is some joy left in the world.

Little Robot Yes, but then the Queen ordered the messengers to be exterminated and I couldn't do it and they escaped.

Astra Alba Oh how proud I am of you!

Little Robot But the Queen said she will deal with me very soon.

Astra Alba Then we must think of something. But I hear her coming. Come to my room while we try to think of a way to escape.
(*They leave. Queen and servant enter*)

Queen I know that I am the most beautiful woman in the world. Ever since I was a child, the Music of the Spheres has sounded that truth around the Universe – but I will ask it once more and the sound will reach Prince Comet on his lonely orbit round his domain. Fetch the Musicians of the Spheres.
(*Servant leads in the musicians*)

Now:
Spheres in perfect harmony,
Which roll through depths of endless space,
In all the Universe you see,
Which lady is most fair of face?

Musicians Dark Queen, our music sings through space,
Praising thy beauteous form and face,
Yet even that can not compare,
With Astra Alba, the most fair.

Queen So that is it. Astra Alba! I hate the girl anyway. And now she is the only thing preventing my marriage. But I shall get rid of her, and then... Guard! Ah! You! (*As Little Robot enters*) You realise that you have been very disobedient – and disobedience to me is a treasonable offence – but in your case I have decided to be magnanimous.

Little Robot Magnanimous... Your Majesty?

Queen Yes – Merciful you fool.

Little Robot Oh thank you, Your Majesty.

Queen Not so fast... Magnanimous on one condition – that you take Astra Alba away and exterminate her.

Little Robot Exterminate her!

Queen For goodness sake stop repeating everything I say like a computer. And be sure that if you do not carry out my orders, I shall find out and then I shall merely exterminate you both. So go at once and save yourself.
(She sweeps out. Astra Alba enters)

Astra Alba Well, what did the Queen say?

Little Robot She says that I must take you away and exterminate you to save my own system... but she does not know that I have a rocket ready for launching, which I saved from your father's expedition to search for the land of the Quarks.

Astra Alba Oh, Yes! The expedition that had to be cancelled when father died.

Little Robot Yes. I shall send you there for the Quarks to look after you. As long as you are not on this planet, the Queen will think you have been exterminated.

Astra Alba How can I ever thank you?

Little Robot Think nothing of it. You have always been kind and good. And perhaps we shall meet again some day. But come. We must reach the rocket without delay.

(End of Scene)



Scene Three – In the Land of the Quarks

Astra Alba Oh, how pretty it is here – all bright and shining – just as our land was when father was alive. And a palace too! I wonder if anyone is at home? (*Rings*) No reply. Never mind. I will rest here in the sun-light. Perhaps someone will come soon.
(*Enter Quarks, Singing*)

Quarks Two by two and three by three,
Never one allowed to be.
Bound by gluons' invisible bars,
Our task is here to polish stars.
Two by two and three by three,
Never one allowed to be.

1st group of Quarks Look! Look! Look!

2nd Group Where? Where? Where?

All A Stranger!

Astra Alba (*Sitting up*) Oh, hello! Who are you?

Quarks Two by two and three by three,
Never one allowed to be.
Bound by gluons' invisible bars,
Our task is here to polish stars.
Two by two and three by three,
Never one allowed to be.

Astra Alba That sounds a very unhappy song. Come, tell me your names and explain why you are feeling so sad.

Top I'll do the introductions, as I'm Top.

Astra Alba Do you mean that you are the most important?

Top No! My name is Top. And he is Bottom.

Bottom Delighted to meet you.

Up And I'm Up.

Down And I'm Down.

Charm (*Conceitedly*) And I'm Charm – and glad to be so.

Up (*Aside*)... and vain too! (*His group giggle. Charm looks angry*)

Strange And I'm Strange – though why, I don't know. I look just the same as the others.

Astra Alba Those are very unusual names. But why do you always stand in threes? It must be very awkward sometimes.

2nd Group of Quarks Oh it is! But that is the way Quarks are. That is one of the reasons why we are sad – for sometimes we long to be separate for a while.

Astra Alba You said *one* of the reasons why you are sad. Are there more?

1st Group with 2nd Group and Top Oh yes, many!
Many! Many! Many!
Starting from the Bottom!

Bottom (*Jumping up*)... Me... Oh, Yes! Well our job, you see, is polishing the stars. It wasn't too bad at first because they were quite close together and we hadn't far to travel, but now they are so far away that we are tired out before we even begin our work – and as the Universe continues to expand we shall not be able to keep them bright.

Charm And then of course there's the legend that there should be seven of us – and if only there were, we could be free. But as we have always to be in twos and threes, I don't think there could be seven.

Strange (*In a puzzled voice*)... 3 into 7 goes 2 – that leaves 1. 2 into seven goes 3 – that leaves 1... Oh dear!

Top Oh, be quiet, Strange. You need a calculator.

Astra Alba Well, my name is Astra Alba. Perhaps I could help?

Top But we haven't told you *all* our troubles yet. The very worst is the Red Giant.
(*Enter Red Giant*)

Quarks The Red Giant! Hide! Hide!

Astra Alba He doesn't look very frightening to me – only very empty and sad. Red Giant where do you come from and why are you so sad?

Red Giant To think that someone should speak to me again! I was once a bright shining star, like a jewel in the heavens. Then I began to swell and grow until I became huge and cold and fearsome as you see me now. But if I am warmed with sympathy like yours, I can change again... as you see. (*He reveals himself as a White Dwarf*)

Astra Alba A White Dwarf!

Quarks She has saved us from the giant. Astra Alba, will you stay with us to look after our home and be here each morning when we return?

Astra Alba If you will let the white dwarf stay too. Would you like that?

White Dwarf

Oh yes, my dear. I have always wanted a home and friends. For even when I was a beautiful star, I was often lonely. And I can help the Quarks in their work too. But only for a while, for I am old and fading and may not last for long.

Quarks

(Dancing round) sing...

Two by two or three by three,

We increase our family.

Now that Astra Alba's here,

We have nothing left to fear.

Dwarf and Astra, Quarks by three,

What a happy family.

(End of Scene)



Scene Four – Same place

(Enter Wicked Queen and servant, leading Little Robot on a rope)

Queen Come along quickly! We'll soon be there. You thought you could get away with it, didn't you? But you forgot The Music of the Spheres, which never lies. Now I'll tie you to this tree so that you cannot warn her, and when she is conquered, I will release you so that you can bear the sad news to her friends. Ha, Ha, Ha! Now for my disguise.
(She dons her disguise)

Astra Alba How lucky I am to live in this lovely place, keeping house for the Quarks, washing their star – polishing cloths, and hearing the fine stories of their travels. How far away my old life seems. And now we have news that Prince Comet will be here in orbit this very day. How I long to see him again and perhaps... but I must not want too much. I have been so lucky already.

Queen *(Aside)*... Prince Comet! Then I was not a moment too soon. *(She comes forward)*... Good Morning my dear!

Astra Alba Oh! Good Morning. You certainly startled me. We so rarely have visitors.

Queen I am sorry to bother you my dear, but I am a servant of the King of Jupiter. Some months ago, we had an unfortunate inter-planetary incident, which caused one of our moons, Ganymede, to fly out of her orbit in this direction. We have tracked her here and I see that she is lying just over the lip of that black crater yonder. I wondered if you could go and stand there to watch where she goes if she slips further, while I go for machinery to retrieve her?

Astra Alba *(Aside)* The Quarks did warn me not to speak to strangers, but I'm sure they will not mind me helping in this way. *(To the Queen)* Where did you say?

Queen Over there... just a bit further... Can you see?

Astra Alba Ow! It's pulling me into the hole. Please help me!
(Little Robot Rushes in)

Queen Ha, Ha, Ha! So you escaped! But too late! As you see, she is gone. Now my Musicians, we will try again!

Spheres in perfect harmony,
Which roll through depths of endless space,
In all the Universe you see,
Which lady is most fair of face?

Musicians Dark Queen, our music sings through space,
Praising thy beauteous form and face,
There is none that with thee doth compare,
Dark Queen, thou art of all most fair.

Queen

At last! Now I shall lie in wait for Prince Comet and *you* can wait here to break the glad news to the Quarks. Ha, Ha, Ha, Ha!

(End of Scene)

Scene Five – The same place

(Quarks, Dwarf, Little Robot, sitting sadly)

- Little Robot** So that is how it happened. I tried my best.
- 1st Quarks** Perhaps Prince Comet will be able to help.
- Dwarf** Nothing ever returns from a Black Hole. No power is great enough.
- Quarks** *(Singing very sadly)*
Two by two and three by three,
Woe to all our family.
All is sadness, all is grief,
Misery beyond belief.
Two by two and three by three,
Help us in our agony.
(Whistling heard, coming nearer. Enter Prince Comet and Servants)
- 2nd Quarks** Hush your song! Hush!
- 1st Quarks** No merriment. Only sorrow!
- Prince** Why? What is this? I heard that Astra Alba lived here with you in happiness and I came to ask for her hand in marriage
- 1st Quarks** Look! Look! See!
- 2nd Quarks** There! There! See!
- Prince** A Black Hole! And she within!
- White Dwarf** Gone forever!
- Queen** So now you must marry me as it was foretold. For I am the fairest of all. Listen to the Spheres.
- Prince** Never, Never! We will release her. Come! We need a massive force.
- Dwarf** But one must certainly perish. My time is nearly up. It is only days before my final fading. I will be at the chain's end, nearest the hole.
- Prince** Then I and all my train. For without her, life would be vain.
- Little Robot** And I will be next – for I loved her, yet I sent her here to die.
- Quarks** And we, and we! So pull. With force! With force!
- Queen** You'll never do it!
(They pull. Astra comes out)

Prince Comet *(His shining hair left in the hole)* Astra Alba!

Queen You stupid thing, Prince Comet. Look at your hair, your beautiful hair! You must save it.
(She rushes up to the hole. Little Robot rushes up and tries to push her in)

Queen Then you will come too!

Quarks No! No!
(Queen is pulled in, taking his Robot costume. He steps out as a Quark)

The Rest But...You're a Quark!

Little Robot Yes I know. The seventh. Now you can all be free. I was under a spell which would only disappear when I performed a completely unselfish act – and I've never been brave enough until now. Oh Dear! Oh Dear!
(He weeps)

All Quarks *(Separating)*
We're free! We're free! Oh Astra Alba – and you our new brother! But where is the White Dwarf?

Prince I'm afraid he gave his life in the rescue. But he only had a few days left anyway.

Astra Alba And he'd have hated to fade away slowly before our eyes. He often told me so.

Prince Never mind, my darling. When we are married, we will build a new palace and name it in honour of him, and we will never forget him.

Top And how the stars will shine at your wedding, now that there are seven of us again.

Bottom Let us have music and sing of our joy

Quarks *(All sing)*
One by one or seven by seven,
Starlight shining bright in heaven.
One tale ended, one begun,
Prince and Alba now are one.
This is now our family,
Prince and Astra and seven we be!

(End of Scene)

Epilogue (In Garden, as in Scene One)

(Sarah with General Relativity. Puppy now a full grown dog)

Sarah Oh, I enjoyed that!

General R. I thought you might.

Sarah But there's one thing I didn't understand.

General R. Yes?

Sarah I thought nothing could ever escape from a Black Hole!

General R. Of course. But there is a power greater than all my powers, which can overcome even Black Holes, and when you return home, I want you to remember it. For the World needs more of it still.

Sarah But what is it?

General R. The power of love, of course. Think about what you have seen and then you will understand. Now, come. Hold my hand and close your eyes. It is time to go.
(He returns Sarah to her seat and goes. She wakes slowly)

Sarah Oh, that was a wonderful dream. General Relativity indeed! But look at the puppy. It has grown up.

(Her mother, old and grey, hobbles in)

And whatever has happened to Mummy?!

The End