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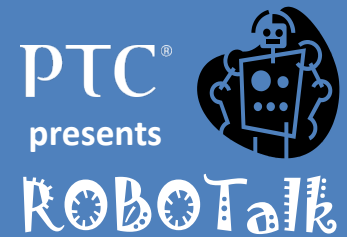
ROBOTalk

Hosted by David Price, the voice of FTC

How to build a
robot from
concept to
competition

October 8th, 2014

WELCOME



- Thank You for joining us!
- PTC Experts on this webinar



Jordan Cox
Director, PTC K12
Programs



Scott Morris
Windchill & Creo
Expert



Mark Cheli
Creo Expert &
Webex Technical
Assistance



Todd Kraft
Creo & Mathcad
Expert



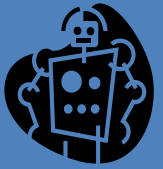
**Kari
Karwedsky**
PTC FIRST
Program Manager

- Our host,

David Price



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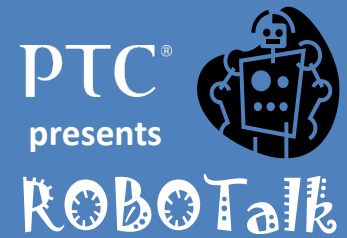
ROBOTalk

WHAT CITY ARE YOU
LISTENING TO
ROBOTALK FROM?

**Text 1129899 and your
message to 22333**

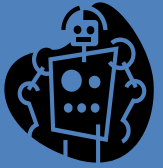
Poll
Everywhere

AGENDA



- Fundraising Ideas! – David Price
- Design Challenge Results from Last Week – Kari Karwedsky
- Poll Everywhere
 - What one word best describes Woody Flowers?
- Creating A Complete Model with Subsystems
 - Mark Cheli
- Questions & Answers

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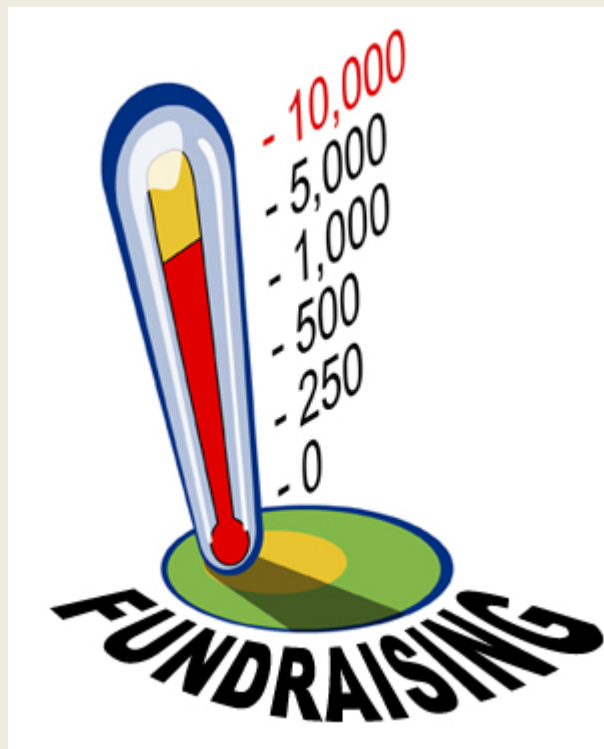


ROBOTalk

FUNDRAISING IDEAS!

David Price

**NOTE TO ALL TEAMS – SHARE YOUR IDEAS,
YOU'RE NOT COMPETING WITH EACH OTHER!**



FUNDRAISING FOR ROBOT TEAMS

- Bring you robot to the Mall or Movie Theater and charge people to drive it!

Bring Extra Batteries

Who wouldn't want to drive a robot!



FUNDRAISING FOR ROBOT TEAMS

- Create your own toilet campaign! (The Flamingo Campaign is so last year)

\$15 For Removal

**\$20 To Put It On Some Else's
Lawn**

\$25 To Buy

**Start with well-known
people that live in high
traffic areas.**



FUNDRAISING FOR ROBOT TEAMS

- Rent A Worker – All Proceeds Goto Team!



*David's
Favorite!*

*He'll Tell
You Why*

FUNDRAISING FOR ROBOT TEAMS

- Yes, candy sales work . . .in some schools.



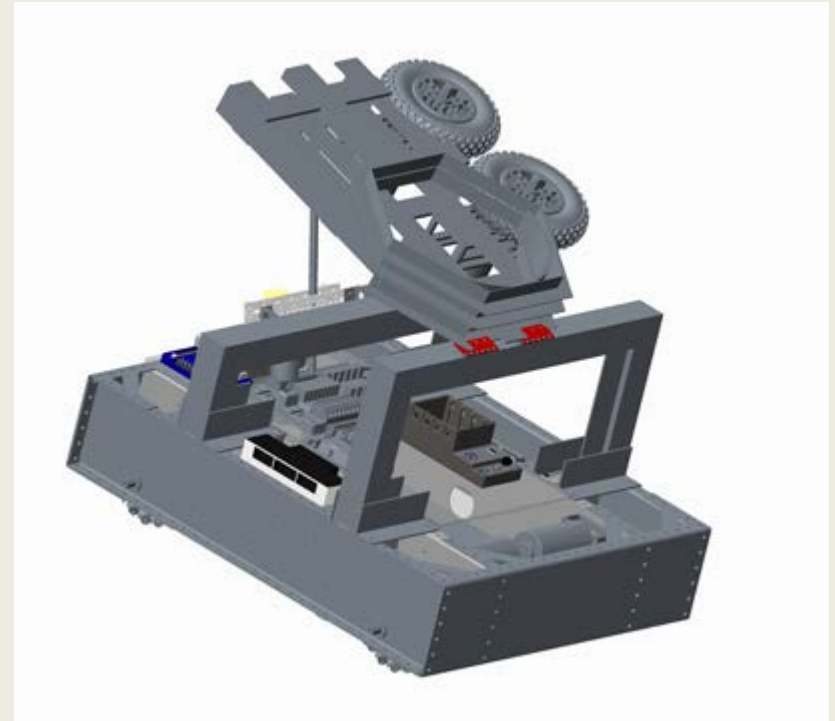
You'll need
start up
money

Buy what
sells!

FUNDRAISING FOR ROBOT TEAMS

- Sell Team Shirts
- Raffles
- Text It!
- Eat for A Cause
- Social Media Call
- And of Course, Light Bulbs

- Now share your Ideas!



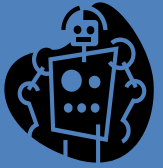
**Shout Out To Team
#5383 for a great
job with PTC Creo!**

FUNDRAISING FOR ROBOT TEAMS

■ Final Tips:

- Some folks just want to give money
- Be aggressive
- Hold Each Member Accountable (I'm sure you already do this)
- Have Silly Prizes For Team Members who reach goals

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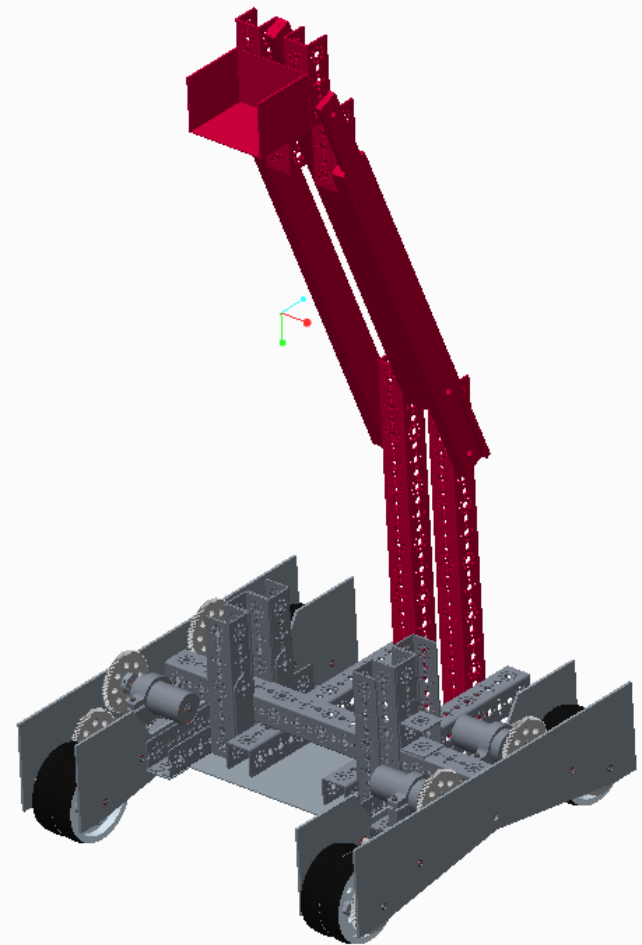
DESIGN CHALLENGE RESULTS

Design a conceptual model of a robot with a lift mechanism (i.e. scissor, slider, etc.) that can lift a wiffle ball 120 cm. The starting conditions for the robot are that it has to fit in a cube 18in x 18in x 18 in

Kari
Karwedsky

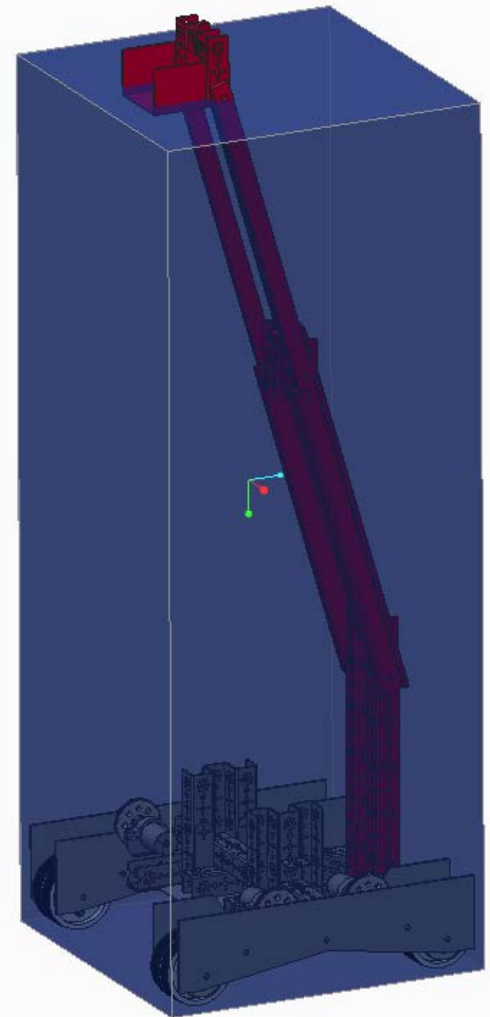
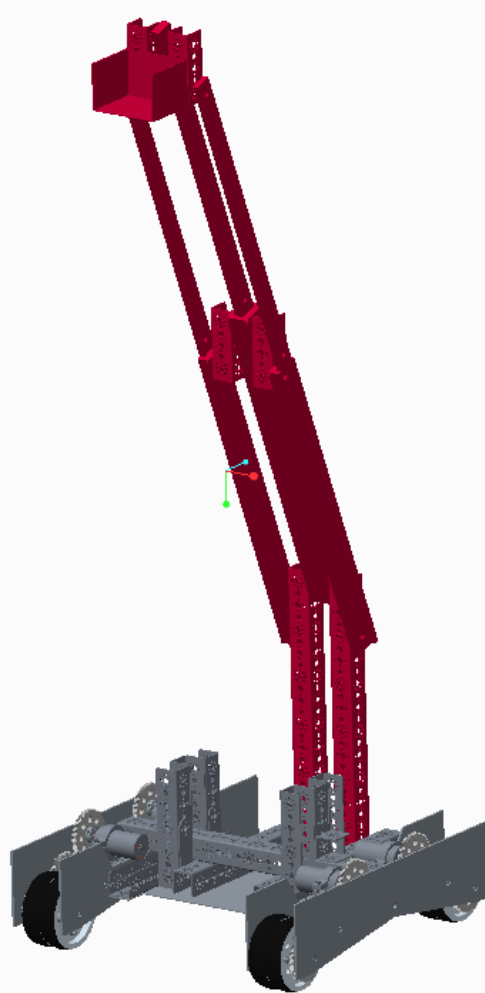
ENTRY FROM BENJAMIN DOMAE FTC TEAM 542 WHS ROBOTICS

- The drive train is our CAD model from one of our robots from last season.
- The lift, however, is new and definitely only a conceptual model.
- It is a mixed design between a four bar linkage and a linear elevator: it uses drawer slides to extend the links in the four bar arm.
- This idea came from one of my team's potential designs for the Ring it up! season that was ultimately scrapped in the brainstorming phase.

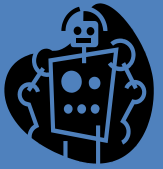


ENTRY FROM BENJAMIN DOMAE FTC TEAM 542 WHS ROBOTICS

- The blue box in the picture represents the 120 cm height required for the design, while the white box in the last picture represents the starting size requirements.



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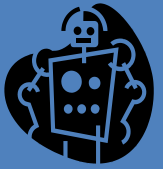
ROBOTalk

WHAT ONE WORD BEST
DESCRIBES WOODY
FLOWERS?

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message to 22333**

Poll
Everywhere

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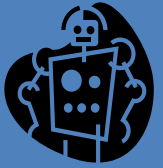


ROBOTalk

CREATING A COMPLETE MODEL WITH SUBSYSTEMS

Mark Cheli

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**ASK THE EXPERTS...
QUESTIONS?**