

Hello again, and welcome back. I'm Jim Tedder in Washington with a program that will help you learn and improve your American English. Today we continue to look at the situation in Ukraine. The country's former president was recently overthrown, and many think corruption was at the center of his downfall. We will provide details.

And then ...bang...not just any bang, but the biggest ever. We'll explore what may have happened billions of years ago when our universe first came into being.

The program is called As It Is, and we are coming your way from VOA.

Many Ukrainians and foreign observers say the government of ousted President Viktor Yanukovich was extremely corrupt. He and his aides are said to have taken billions of dollars in public money. The country is now in bad financial shape. Milagros Ardin looks at some of the issues Ukraine faces on the road to recovery.

Ukrainian President Viktor Yanukovich fled the country in late February. Since then, people have come to visit his richly equipped home and estate, near the capital, Kyiv. They got an eyeful: a huge house built from pieces of wood and set on 137 hectares of land. The property has been valued at more than \$75 million. Reports say improvements to the dining hall and a tea room alone cost \$2.3 million dollars.

The estate began as a property of the state. President Yanukovich turned it into a private home. And, many Ukrainians believe he paid for everything by stealing and through corruption. Many also accuse him of letting close friends rob the country.

Anders Aslund is with the Peterson Institute for International Economics. He says the amount of money taken is unbelievable.

"Prime Minister Arseniy Yatsenyuk has mentioned \$37 billion as the total amount of loot of the Yanukovich regime. That, of course, includes, also, other members of the regime that are not considered members of "the family" such as Andrei Khluyev and Borys Kolesnikov.

You can look upon the Ukrainian government under former President Yanukovich as an organized crime syndicate. And, a major purpose of the syndicate was to loot as much money as possible from the government.”

Ukraine's new government is working with the United States, the European Union, and others. It wants to block the use of money and property connected to Mr. Yanukovich and his aides. The hope is that some of what was stolen can be recovered.

Some groups say the West is partly to blame for Ukraine’s financial losses and must take responsibility for it. Nathaniel Heller works for Global Integrity, an independent, non-profit group.

“To ignore the role that financial institutions in the West, that multilateral institutions play, I think, is just seeing the glass not just half full, but sort of seeing only half the glass.”

As Ukraine struggles with both economic and political crises, Anders Aslund suggests two ways Western lawmakers can help.

"The easy thing is to introduce a law on competitive tenders for public procurement. You need to clean up the gas industry, which has been the main hub of corruption throughout, which means to adjust gas prices at all levels to the market level - or cost of recovery level".

He and others say reform is also needed in Ukraine's legal system, which is widely believed to suffer from corruption. For laws to have real teeth in them, they say, judges must be willing to punish people who take money from the state. I'm Milagros Ardin.

Oh, What A Bang It Was!

Look up at the night sky. You will see stars, stars, more stars! And planets and things that are greater than a human mind can understand. How did it all come to be? And when? These are perhaps the most puzzling questions we will ever ask. With what may be an answer, or at least part of the answer, is our newest team member, Jonathan Evans.

Scientists say they have discovered evidence of what caused a huge explosion billions of years ago. The discovery provides firm support for the most popular scientific idea of how the universe began. It is called the “Big Bang” theory.

The new research provides the first strong evidence that the universe expanded quickly in its first moments of existence. Scientists are calling this period ‘inflation’.

Experts say the research may be one of the most important discoveries in the history of science. Max Tegmark is a physicist at the Massachusetts Institute of Technology. He says this is the kind of discovery that wins Nobel Prizes.

“I think this is going to go down, if it stands the test of time, as one of the greatest discoveries in the entire history of science, and I really don’t say that lightly.”

This sudden rate of growth left gravitational waves in space. Albert Einstein had predicted the existence of such waves, but none have been observed until now.

Marc Kamionkowski is an astronomer at Johns Hopkins University in Maryland. He says scientists do not know what the force was that drove those waves.

“One of the reasons why this discovery is exciting is because inflation does require that there’s some new fundamental physics beyond the four forces that we know about.”

Michael Turner is with the University of Chicago in Illinois. He describes this force as “the dynamite behind the Big Bang.” He believes it may be the force that unifies gravity, which acts on everything we see, and quantum mechanics, which governs the world of subatomic particles.

“We see a link between them. And the question is, can we figure out the theory of everything? Can we put it all together?”

He adds that nearly 14 billion years after the Big Bang, evidence of inflation could not be easily found.

“Looking for the gravity waves from inflation by many was called ‘folly’ or chasing a wild goose.”

The Harvard-Smithsonian Center for Astrophysics led the group of researchers who made the discovery. They worked at a radio telescope in Antarctica at the South Pole. The air at the South Pole is dry, and there is little human interference.

The researchers examined the background radiation of the universe. They suspect this is the last sign of energy from the Big Bang. They found a turning, twisting pattern in the extremely small differences in radiation levels. The scientists say these variations mark the movement of gravity waves.

The research has yet to be published in a scientific journal. Experts who have seen the evidence say the findings are interesting, but that other scientists will need to confirm it. I’m Jonathan Evans.

And I’m Jim Tedder in Washington. This is As It Is on VOA.

